Job Futures

NEWFOUNDLAND

Occupational Outlooks

Volume 1

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Edition

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Introduction

Background

Choosing a career or changing your line of work is a challenge, giving rise to a lot of questions. What occupations can I enter with my educational background? What qualifications do I need to enter a specific occupation? What is the job market like? What jobs are sensitive to technological change? Where do the best opportunities for me lie?

Job Futures - Newfoundland helps to answer these questions by providing valuable information on the educational system and on future occupational labour markets. *Job Futures - Newfoundland* is designed for students and educational counsellors, as well as for people interested in changing careers or re-entering the labour market.

In addition to statistical profiles, *Job Futures* contains descriptive information on various features of occupational labour markets. Representatives of industry, labour, provincial governments and education offered their special perspectives. The result is a comprehensive view of present and future labour market conditions.

Volume One of *Job Futures - Newfoundland* provides information on current and future labour market situations for specific occupations. Volume Two concentrates on the link between the educational system and the labour market through analysis of the labour market outcomes for graduates of the province's post-secondary institutions.

How Volume One Works

Volume One answers such questions as:

- What exactly does someone in a given occupation usually do?
- What are the normal working conditions for this occupation?
- What sort of education do I need to enter this occupation?
- Is this occupation opening up to women?
- What are my chances of getting full-time or part-time work in this occupation?
- Is employment stable, or can I expect periods of inactivity in this occupation?
- What are the career opportunities for someone in this occupation?
- Are there many job openings expected in this occupation?
- How much do people in this occupation normally earn?

Much of the information in Volume One can be used by young people still in school. It can help them choose a career and set the course of study required to achieve their career aspirations. Similarly, the information in Volume One can help individuals contemplating a career change or a continuation of their education through part-time studies. For these people, *Job Futures - Newfoundland* can help target occupational goals and help identify the additional education they may need to reach those goals.

Organization of Volume One

Volume One is organized according to occupation as described in the Standard Occupational Classification. The code numbers (such as 1132, 1171, etc.) and occupation titles are those used by Statistics Canada in the coding of the Census and the Labour Force Survey. The first two digits of the code number indicate the general occupational field (for example, 11 corresponds to managerial occupations); the second two numbers indicate the specific occupation. (Thus, 1132 indicates managerial occupations generally and managers in social sciences specifically.) Altogether, *Job Futures - Newfoundland* covers nearly 130 such occupational groups.

Each occupational group has two pages of information devoted to it, one page of statistical data and one of descriptive and analytical text.

The statistical tables are designed for quick and easy reference which allows the reader a ready overview of the labour market situation of the particular occupational group. They include an estimate of the number of people employed in this occupation in 1990, growth comparisons between the 1980's and the early 1990's, and the projected number of job openings over the 1990-1995 period. Composition of the group by age and sex, the percentage of part-time employment, the main industries in which the occupation is found, and the distribution of employment around the province are also included.

The narrative texts contain brief job function descriptions, information on working conditions, educational requirements, age and sex trends, career ladders and the effects of technological change; labour market assessments; notes on seasonality of employment; notes on sensitivity to changes in the business cycle; and data on earnings.

The analysis and reported figures apply to the occupational title that normally represents an entire occupational group. However, a statement that applies to a group may not apply to each individual occupation within the group. For example, if a statement refers to art restorers, it does not necessarily apply to painting restorers, even though they are both a part of the Technicians in Library, Museum, and Archival Sciences group. Not all occupations in the Standard Occupational Classification are listed because not all have easily-recognized supply channels. For some occupations, training is industry specific with low-skill requirements, and promotion is from within. For others, skill requirements are such that high school graduates are the main source of new supply.

Estimates of labour force withdrawals refer only to voluntary departures from the labour force and departures due to death. Statistics on inter-occupational transfers are not included because of lack of data.

An index, organized alphabetically by occupation, is included.

Explanation of Terms and Headings Used in Volume One:

This Occupation - the occupational group(s) listed at the top of the page.

All Occupations - all occupations in the labour market including occupations that are not listed in *Job Futures - Newfoundland.* It allows you to compare the specific occupation to the average for all occupations.

Number of Jobs 1990 - an estimate of the number of people working in the occupation in 1990.

Average Annual Growth Rates (%) - the average annual percent change in the number of people working in the occupation between 1981 and 1990, and between 1990 and 1995.

Number of Job Openings - the number of jobs that will open over the entire 1990-to-1995 period. This number includes both the number of jobs created as a result of growth in the economy, as well as those expected as a result of people leaving the occupation because of death, retirement, and returns to the education or household sectors. This number does not include openings that arise when people move from one occupational group to another.

Sex Composition - taken from the 1981 and the 1986 censuses. A comparison to all occupations is included.

Age Composition - also taken from the 1981 and 1986 censuses. A comparison to all occupations is included.

Full-time, Part-time - workers who, at the time of the 1981 and 1986 censuses, identified themselves as being full-time or part-time workers. A comparison to all occupations is included.

Main Industries of Employment - the first line of this table lists the three largest major sectors of employment for the occupation. The next three lines list the main individual industries (based on the COPS industry structure) within the major sectors, to a maximum of three, for the occupation. The percentages represent the proportion of employment found in the sector or industry at the time of the 1986 Census.

Geographic Distribution of Employment - taken from the 1986 Census. It represents the employment distribution of the occupation and not necessarily the distribution of anticipated job openings.

Geographic Distribution of U.I. Beneficiaries - represents the number of regular unemployment insurance beneficiaries without earnings in the occupation as of September, 1991, distributed by Canada Employment Centre area.

Job Environment - includes several individual occupations found in the group, general job duties and responsibilities of the occupational group. These job descriptions are not definitive; rather, they are intended to provide you with a flavour for the type of work performed by the group and an idea of their job situations.

Training and Qualifications - the usual educational attainment levels and skills achieved by the people working in the occupational group. There are exceptions to virtually every occupation, so you are cautioned again that this information is to give you a general notion of the education usually required of people in the group.

Nature of Supply - contains information on the types of people that normally enter the occupation. For example, workers entering an occupation may come directly from the educational system or work their way up from another occupation. The educational background of those presently employed in the occupation is briefly discussed. Desirable characteristics and possible career paths are also identified in this section. Finally, representation of women, age structure, and geographical distribution of the occupation may be described.

Job Prospects - contains information on the job market conditions for the occupation and the factors that affect them. The expected rate of employment growth is compared to that for all occupations. (Overall growth is expected to average 2.2 percent per year to 1995. Growth expectations ranging from 2.0 percent to 2.5 percent are considered about average.)

Since people are hired not only to fill new jobs, but also to replace workers leaving existing jobs, the anticipated number of replacement openings is noted. These are estimates of openings resulting from withdrawals because of death, retirement, returns to education, and returns to the household. They do not include estimates of the movement from the occupation to other occupations. Occupations which may be among the quickest to decline during a recession but may be among the first to rebound during a recovery are said to be "sensitive to economic fluctuations". This is noted where applicable.

A description of the technological, demographic, organizational, or other factors that affect the group may be included. Occupational employment projections are based on a changing occupational composition of industries. Many occupations increase or decrease their representation within an industry over time for various reasons. Pertinent commentary on some of these reasons and the extent of their impact is supplied where possible.

Earnings - wage or salary information is provided, where available. Other forms of compensation are not included. The source of wage or salary information is the 1986 Census of Canada.

Other Sources of Career Information

Job Futures - Newfoundland should not be treated as stand-alone career information, but as a companion with other sources. It does not provide complete information on training requirements, educational qualifications, full job descriptions, or working conditions. To find out more about possible career choices the reader is encouraged to explore other sources, including:

> Career Information Hotline, Department of Employment and Labour Relations. Phone (709) 729-6600 or toll free 1-800-563-6600.
>
> *Choices* - an Employment and Immigration Canada interactive computer system that allows students to ask pertinent questions about career options. *Choices* is accessible at high schools throughout the province, or at the Canada Employment Centre in your area.
>
> *Job Futures* (1990 edition) - a national publication of Employment and Immigration Canada which provides similar information as contained in *Job Futures - Newfoundland*, but at the national level.
>
> *Canadian Classification and Dictionary of Occupations* - an Employment and Immigration Canada publication which provides more comprehensive information on job descriptions than is contained here.

As well as the above sources, school guidance counsellors, employer/employee associations, licensing boards, and educational institutions, as well as individuals working in particular occupations can provide valuable information regarding career options.

Occupational Outlooks

General Managers and Other Senior Officials 1130

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,550	8.5	3.4	549
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	935	2
Grand Falls	60	1
Stephenville	35	0
Corner Brook	90	4
Labrador	105	1
Harbour Grace	50	0
Clarenville	35	0
Marystown	45	1
Gander	50	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	88	12	0	83	17	95	5
	1986	89	11	0	81	19	97	3
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (24)	Services (21)	Public Administration (17)
- Wholesale (16)	- Miscellaneous (6)	- Federal (8)
- Retail (8)	- Business (5)	- Provincial (7)
	- Accommodation and Food (4)	- Local (2)

General Managers and Other Senior Officials 1130

Job Environment

Positions in this classification pertain to top or senior management and include presidents, vice-presidents, chairpersons, directors, executive directors and general managers. Besides motivating and directing other workers, senior managers are responsible for planning and organizing: they make decisions regarding overall corporate strategy, company policy and structure, finance and expansion of their organization. They spend much of their time in meetings, assimilating and synthesizing information in order to make effective decisions. Most organizations, whether government, non-profit, business and industry, cultural or education, rely on the effective leadership of their top management.

Training and Qualifications

Most senior managers have extensive experience in management and in their particular organization. Typically, senior managers work their way up the occupational ladder, gaining first hand knowledge of the firm's operations.

A majority of people in this occupation have either a university degree or a post-secondary certificate or diploma. While the educational backgrounds of senior managers vary considerably, the two largest areas of study are business administration, and engineering technologies and trades. In addition to its Bachelor of Commerce program, Memorial University offers a degree in Masters of Business Administration as well as certificate and diploma programs in business administration. The Cabot Institute offers a three-year program in business administration.

Nature of Supply

This occupational group continues to be dominated by men. The percentage of women in senior management remained relatively stable between 1981 and 1986 at just over 10 percent. Two-thirds of the general manager positions in the province were located in the St. John's Metro CEC area. Given the nature of the occupation it is not surprising that there are no general managers in the 15-24 age group and a higher than average percentage in the 55 and over age group.

Job Prospects

The number of general managers in the province almost doubled between 1981 and 1986. With an estimated annual growth rate in excess of 8 percent, this occupation was one of the fastest growing occupations in the province during the 1980's. While employment growth is expected to slow in the 90's, the occupation is still expected to expand at a faster rate than the overall average for all occupations.

Approximately 550 positions are expected to open up in this occupational area by 1995. Of these, about half will be generated by economic expansion over the period and half will be replacement openings that become available as those presently in the positions retire. The large number of replacement openings is not surprising given the relatively older age structure of the occupation.

For the most part, general managers are employed on a year-round basis and are not significantly affected by fluctuations in economic conditions. This is reflected in the low number of unemployment insurance beneficiaries in this occupational area. Relatively few general managers are employed on a part-time basis. In fact, many general managers work well in excess of the standard forty-hour work week.

1985 Annual Earnings

Lowest 10% of Workers	$ 19,474 or less
Average Worker	$ 48,283
Highest 10% of Workers	$ 86,567 or more

Source: 1986 Census

Financial Management Occupations 1135

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	942	.5	2.1	205
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	520	7
Grand Falls	90	0
Stephenville	25	0
Corner Brook	65	0
Labrador	35	0
Harbour Grace	35	0
Clarenville	5	0
Marystown	35	0
Gander	30	1

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	80	20	10	85	6	99	1
	1986	76	24	5	89	6	98	2
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Finance, Insurance & Real Estate (67)	Services (9)	Public Administration (9)
	- Miscellaneous (2) - Business (2) - Education (2)	- Provincial (4) - Federal (3) - Local (2)

Financial Management Occupations

1135

Job Environment

This occupational category includes bank directors, branch managers, loan managers, controllers and vice-presidents of finance. Today's financial managers are experts in management, marketing, industry and financial analysis. They oversee the operation of a financial institution or of a department responsible for administering chequing and savings account services, loans, trust services and portfolio management. They may also provide financial advice to individuals and corporate customers. Senior managers such as directors and vice-presidents establish objectives, coordinate the work of branches or departments and formulate policies. In the complex world of finance, these managers must act quickly and decisively, sometimes under a great amount of pressure.

Nature of Supply

While most financial managers are men, the number of women in the occupation has been increasing. In 1986, one out of four financial managers in the province were women compared to one in five in 1981. Over 60 percent of the positions in the occupation were located in the St. John's Metro CEC area. Given the nature of the training and experience required for the position it is not surprising that relatively few financial managers fall into the less than 25 age category. At 6 percent, the number of financial managers age 55 and over is roughly in line with the all occupation average.

Job Prospects

Employment in this occupation remained relatively stable between 1981 and 1986. Employment growth for the 1980's as a whole is estimated to have been well below the growth rate recorded for all occupations. This is largely due to the fact that the Finance, Insurance and Real Estate industry, where a majority of financial managers are employed, showed little change in employment throughout the decade.

The number of financial managers in the province is expected to grow at the average rate for all occupations over the projection period. Approximately 200 positions are expected to open up in this occupational area by 1995. Of these, roughly half will be new positions resulting from economic expansion and half will be replacement openings that become available as those presently in the positions retire.

Generally speaking, financial managers are employed on a year-round basis and are not significantly affected by fluctuations in economic conditions. This is reflected in the low number of unemployment insurance beneficiaries in these occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 19,991 or less
Average Worker	$ 35,515
Highest 10% of Workers	$ 51,007 or more

Source: 1986 Census

Sales and Advertising Management Occupations 1137

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	5,023	7.3	3.1	1,569
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	1,535	20
Grand Falls	355	7
Stephenville	270	2
Corner Brook	535	7
Labrador	185	1
Harbour Grace	315	2
Clarenville	130	2
Marystown	140	1
Gander	375	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	81	19	11	81	8	95	5
	1986	70	30	8	78	14	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (84)
- Retail (71)
- Wholesale (13)

Services (5)
- Accommodation & Food (2)
- Business (1)
- Miscellaneous (1)

Manufacturing (5)
- Food and Beverage (2)
- Printing and Publishing (1)
- Non-Metalic Minerals (1)

Sales and Advertising Management Occupations 1137

Job Environment

This category includes managers in advertising, marketing, and department and retail stores.

Advertising managers are responsible for projecting their company's image in the marketplace and for selling their products or services through advertising. Working closely with production, design, financial and marketing people, technical experts and top managers, they plan and execute effective advertising campaigns.

Retail store managers and retail department managers are responsible for the day-to-day operations of their store or department and are concerned with sales more than with advertising and promotion.

Training and Qualifications

As with most managerial positions, jobs in advertising and sales management require extensive experience and thus are generally not entry level positions. Qualifications vary enormously but most positions require high school graduation as a minimum. A university degree or certificate in the relevant field is essential for a career in technical sales. Sometimes, as in real estate or financial securities, licensing is compulsory.

Memorial University offers a Bachelor of Commerce degree with a marketing option. The Cabot Institute offers a three-year program in Business Management with a marketing option. The Fisher Institute and the Central Community College offer two-year programs in Business Administration with a retail management option.

Nature of Supply

At present, people employed in these occupations have a wide range of educational backgrounds. Some have high school education while others have a university degree. For those with post-secondary education, commerce and business administration, and engineering and applied science were the most common areas of specialization.

While men still hold a majority of the positions in this occupational area, the number of positions held by women has been increasing. In 1986 women accounted for 30 percent of employment in this area compared to 19 percent in 1981. Roughly 40 percent of sales managers were located in the St. John's Metro CEC area with the remainder scattered fairly evenly around the rest of the province. As would be expected given the nature of the positions, relatively few sales managers were less than 25 years of age. At 14%, the number aged 55 years and over is almost double the average for all occupations.

Job Prospects

Employment in this occupational area increased by over 50 percent between 1981 and 1986. For the 1980's as a whole employment is estimated to have increased by over 7 percent per year, well in excess of the overall average. This is largely due to employment expansion in the retail trade sector where this occupational group is concentrated. While the number of sales managers employed in the province is projected to increase, growth is expected to be slower than in the previous decade but still above average.

Some 1,600 positions are expected to open up by 1995. Of these, just over half should stem from economic expansion with the remainder being replacement openings that arise as those presently in the positions retire. The large number of replacement openings is not surprising given the relatively older age structure of the occupation.

In general, this occupational group enjoys stable year-round employment and is not particularly sensitive to economic fluctuations. Given the size of the occupation, the number of unemployment insurance beneficiaries is extremely low.

1985 Annual Earnings

Lowest 10% of Workers	$ 10,894 or less
Average Worker	$ 25,565
Highest 10% of Workers	$ 42,518 or more

Source: 1986 Census

Accountants, Auditors and Other Financial Officers 1171

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,203	0.5	2.3	548
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	1,395	54
Grand Falls	125	2
Stephenville	50	3
Corner Brook	165	11
Labrador	35	0
Harbour Grace	80	5
Clarenville	30	4
Marystown	15	3
Gander	120	2

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	76	24	10	84	6	94	6
	1986	71	29	6	87	7	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (28)
- Business (22)
- Education (2)
- Accommodation and Food (2)

Finance, Insurance & Real Estate (24)

Public Administration (19)
- Provincial (11)
- Federal (7)
- Local (1)

Accountants, Auditors and Other Financial Officers

1171

Job Environment

This occupational category includes accountants, auditors, underwriters, tax consultants, loan advisors and various other financial officers with an accounting background. The two most widely recognized accounting streams, financial accounting and management accounting may be practised publicly or privately by accountants who have one of three professional designations.

Chartered accountants are involved in auditing, tax planning, estate planning, financial advising as well as trustee and bankruptcy work. Most CAs work as public accountants rather than work for a particular employer. Certified management accountants (CMAs) are employed by individual companies or government. They are primarily concerned with the management, planning and control of their employer's affairs. Certified general accountants (CGAs) prepare financial statements and tax returns and undertake financial analyses. One of their main functions is to report on the health and financial status of a company.

Training and Qualifications

Training for these occupations varies, but applicants usually require high school graduation supplemented by some form of post-secondary education. To become a chartered accountant, one must complete a university degree. After obtaining employment with a CA firm and enroling in the Atlantic School of Chartered Accountants, one can work toward a CA designation through correspondence or part-time lectures, which takes a minimum of two years, prior to writing final examinations. Students wishing to become CMAs or CGAs can undertake part-time or correspondence courses while working full-time in an accounting environment. A minimum of two years of relevant work experience is also required.

The Cabot Institute offers a three-year program in business administration with an accounting option. Two-year programs are offered at the Fisher Institute and the Central Community College. Graduates of these programs can receive credit towards the CGA or CMA programs. Memorial University's Bachelor of Commerce program has an accounting/finance option which can be credited towards the CA, CGA, or CMA programs. Some private schools in the province also offer business administration programs of varying duration.

Nature of Supply

Over half the accountants and auditors in the province have background in commerce or business administration. Another third do not have any type of post-secondary education whatsoever. This group received their training through work experience and part-time or correspondence courses.

While men still outnumber women in this occupation, the percentage of jobs held by women has been increasing in recent years. In 1986, they accounted for 29 percent of the profession compared to 24 percent in 1981. The number of young people in the occupation declined slightly over the period. This indicates that, in recent years, new entrants into this occupational area require some type of post-secondary education. Almost 70 percent of all jobs in this occupation were located in the St. John's Metro CEC area.

Job Prospects

Employment in this occupational area showed very little change between 1981 and 1986 and employment growth for the decade as a whole is estimated to have been slightly below average. The situation is expected to improve in the 1990s. Employment growth in the occupation to 1995 is expected to match the provincial average of just over 2 percent per year.

Of the 550 job openings expected by the mid 1990s, roughly half will be new positions resulting from economic expansion and half will be replacement positions that arise when those currently in the occupation retire. Employment expansion is expected to take place in business services and finance, insurance and real estate, two sectors which employ large numbers of accountants and auditors.

This group tends to be employed on a year-round basis and is not significantly affected by fluctuations in economic activity. The high employability of this group is reflected in the number of U.I. beneficiaries which is extremely low given the large number of people employed in this occupation.

1985 Annual Earnings

Lowest 10% of Workers	$ 17,699 or less
Average Worker	$ 28,500
Highest 10% of Workers	$ 43,011 or more

Source: 1986 Census

Personnel and Related Officers 1174

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	612	4.1	0.6	95
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	315	5
Grand Falls	45	0
Stephenville	45	1
Corner Brook	55	1
Labrador	35	0
Harbour Grace	30	1
Clarenville	25	1
Marystown	30	2
Gander	15	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	72	28	7	85	8	92	8
	1986	55	45	16	78	6	93	7
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (71)	Services (11)	Manufacturing (8)
- Federal (59)	- Hospitals (4)	- Food and Beverage (6)
- Provincial (11)	- Business (3)	- Pulp and Paper (1)
- Local (1)	- Education (2)	- Shipbuilding (1)

Personnel and Related Officers

1174

Job Environment

This category includes occupations such as personnel officers, employee relations specialists, industrial relations officers and employment counsellors. Primarily concerned with the effective use of human resources in an organization, personnel administrators determine staff requirements, analyse job specifications, prepare job descriptions, advertise vacancies, interview and test candidates, organize employee training and development programs, and help develop personnel policies. In the case of a collective agreement, personnel administrators are usually involved with contract negotiations and implementation of the agreement.

Training and Qualifications

Although there are no specific qualifications for entry into this occupation, most personnel officers in the province have some type of post-secondary education. The most common area of specialization is business administration or commerce. Memorial University's Bachelor of Commerce program offers a management/industrial relations option.

Nature of Supply

The percentage of women in this occupation increased dramatically between 1981 and 1986 to reach 45 percent. Female representation in this occupation is now higher than it is in the labour force as a whole. While the percentage of young people iln the occupation doubled in the early 1980s, youth still account for a smaller than average proportion of employment in this occupation. This reflects the increasing need for some form of post-secondary education in order to enter this occupation. Approximately 50 percent of personnel officers in the province were located in the St. John's Metro CEC area, with the remainder spread fairly evenly around the rest of the province.

Job Prospects

The number of personnel officers in the province increased rapidly between 1981 and 1986. For the decade as a whole, employment is estimated to have increased by 4 percent per year, a rate well in excess of the provincial labour market average. Such strong growth is not expected to be maintained into the 1990s however, since the Public Administration sector, where a large number of personnel officers are concentrated, should experience only marginal growth by 1995.

Despite slower than average growth in this occupation, approximately 100 job openings are expected to arise by 1995. Of these, roughly 75 percent will be jobs that become available as those presently in the positions retire. The remaining 25 percent are expected to come from economic expansion.

Personnel officers tend to be employed on a year-round basis and are not significantly affected by fluctuations in economic activity. This is reflected in the number of unemployment insurance beneficiaries which is very low considering the number of people employed in the occupation.

1985 Annual Earnings

Lowest 10% of Workers	$ 16,887 or less
Average Worker	$ 29,212
Highest 10% of Workers	$ 39,422 or more

Source: 1986 Census

Purchasing Officers and Buyers, Except Wholesale and Retail Trade 1175

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	216	3.6	3.2	59
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	95	5
Grand Falls	25	1
Stephenville	10	2
Corner Brook	15	0
Labrador	10	0
Harbour Grace	10	0
Clarenville	15	2
Marystown	5	0
Gander	25	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	91	9	14	86	0	100	0
	1986	77	23	9	84	7	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (44)
- Food & Beverage (39)
- Pulp and Paper (2)
- Shipbuilding (2)

Transport & Communications & Utilities (27)
- Electric Power (17)
- Miscellaneous Transport (7)
- Water Transport (2)

Services (17)
- Hospitals (7)
- Education (5)
- Health & Welfare, Non-Hospital (2)

Purchasing Officers and Buyers, Except Wholesale and Retail Trade 1175

Job Environment

Purchasing officers, also known as buyers, field contractors, procurement officers or purchasing managers, buy materials, goods and services for use or for further processing by their firms. Although primarily responsible for ensuring good value for money spent, purchasers must also keep in mind the continuing smooth operation of the company. Purchasers develop and interpret specifications for goods or materials; study technical publications, documents and advertising materials; interview suppliers; invite tenders and sometimes negotiate with vendors. After prices are set and the agreement to purchase is completed, they must schedule shipments from suppliers and ensure that deliveries are made on time. This is an office occupation with a normal work week of five days and 35 to 40 hours.

Training and Qualifications

There are no formal requirements for this occupation, however, most employers look for candidates with some form of post-secondary education. New entrants to the field undergo a period of on-the-job training before moving on to more senior positions. Many purchasing officers enrol in the Professional Purchaser Diploma Program offered by the Purchasing Management Association of Canada. The program, which takes several years to complete, is available through a combination of lectures and correspondence courses. Business courses offered at either Memorial University or community colleges around the province would be a valuable asset for entry into this field.

Nature of Supply

Roughly half of the purchasing officers and buyers in the province have some form of post-secondary education, with commerce and business administration being the most common areas of study.

Although men still predominate, the number of women employed in the occupational area has been increasing. Only 9 percent of purchasing officers were women in 1981 compared to 23 percent in 1986. The percentage of young people in the occupation declined between 1981 and 1986 which may indicate an increasing desire on the part of employers to hire purchasing officers who have some form of post-secondary education. The increase in the percentage of older workers in the occupation over the same period suggests that some jobs will become available as these older workers approach retirement age. Approximately one in two purchasing officers in the province were employed in the St. John's Metro CEC area.

Job Prospects

Purchasing officers and buyers experienced a significant increase in employment between 1981 and 1986. For the decade as a whole, employment in the occupation is estimated to have increased at a much faster rate than the provincial labour force average. This trend is expected to continue into the 1990's.

This occupation is expected to experience above average growth over the projection period. Of the 60 jobs expected to open up by 1995, roughly two-thirds should result from economic expansion while one-third will be replacement openings that arise as existing workers retire from the labour force.

For the most part, this occupation tends to offer year-round employment and is not significantly affected by seasonal factors. A possible exception could be purchasing officers employed in the fish processing component of food and beverage manufacturing since many fish plants in the province operate on a seasonal basis. The occupation is not overly sensitive to fluctuations in economic activity although some positions in the manufacturing sector could be affected during protracted economic downturns. The low number of U.I. beneficiaries relative to employment in the occupation is indicative of the stable nature of employment in this area.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,482 or less
Average Worker	$ 24,070
Highest 10% of Workers	$ 31,589 or more

Source: 1986 Census

Chemists 2111

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	37	-11.0	1.1	7
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	25	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	0
Labrador	5	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	73	27	0	100	0	100	0
	1986	83	17	0	83	17	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (38)
- Chemicals & Chemical Products (25)
- Non-Metalic Minerals (13)

Public Administration (38)
- Provincial (25)
- Federal (13)

Mining (13)
- Metals (13)

Chemists

2111

Job Environment
Chemists study the chemical nature of substances, with the aim of either increasing chemical knowledge (basic research) or developing improved materials and processes (applied research). They also work in quality control and as supervisors in industry. Areas of specialization include organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, theoretical chemistry, biochemistry, agricultural chemistry, polymer chemistry, geochemistry and clinical chemistry.

Chemists are found in hospital laboratories, in teaching/research positions in universities and colleges, in government laboratories, provincial research organizations and in laboratories in the manufacturing and processing sectors. Many are employed in quality control.

Training and Qualifications
A Bachelor of Science degree with a major in chemistry is the minimum requirement for this occupation. Some research and teaching positions, particularly at the university level, may require a Master's or Phd degree. Memorial University offers degree programs in chemistry and biochemistry at the bachelor's, master's, and PhD levels.

Nature of Supply
Most chemists in the province are university graduates with training in chemistry or a related science. After rising dramatically in the 1970s, the percentage of women in this occupation fell between 1981 and 1986. This may be explained in part by the large decrease in employment which befell the occupation in the 1980s. Since many women had only recently been hired, they were among the first to be affected during the employment contraction. The fact that no young people were in this occupational group is a reflection of the educational requirements and the poor labour market for chemists in recent years. However, with a significant number of chemists approaching retirement age, some replacement positions should open up over the medium term. Most chemists in the province reside in the St. John's Metro CEC area.

Job Prospects
The number of chemists employed in the province declined dramatically between 1981 and 1986. The decline occurred in several industries including Mining, Forestry and Education. Over the entire decade, employment is estimated to have declined by over 10 percent per year. Employment prospects are expected to improve slightly in the 1990s.

In contrast to the 1980s, employment growth in this occupational area is expected to be positive though slightly below average over the projection period. The number of job openings will be relatively small however, reflecting the small size of this occupation in the province.

Generally speaking, chemists enjoy stable year-round employment. While the occupation is not particularly sensitive to fluctuations in economic conditions, some chemists employed in resource or manufacturing industries could be negatively affected during economic downturns. The stable nature of employment is reflected in the very low number of U.I. beneficiaries in this occupation.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 32,258
Highest 10% of Workers	N/A

Source: 1986 Census

Geologists 2112

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	96	-0.2	6.4	48
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	75	7
Grand Falls	10	1
Stephenville	0	0
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	10	1
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	96	4	35	65	0	96	4
	1986	90	10	18	82	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (47)
- Business (26)
- Education (21)

Public Administration (32)
- Provincial (32)

Mining (21)
- Mining Services (11)
- Petroleum & Gas (5)
- Non-Metals (5)

Geologists

2112

Job Environment

This category includes geochemists, geophysicists, hydrologists, mineralogists, oceanographers and seismologists, all of whom are concerned with the earth's crust and its layers.

Most geologists divide their time between fieldwork (such as mapping) and office work or research. Government geologists may gather and analyze general information about oil and mineral resources. Geologists in industry may examine oil and mineral occurrences and map the geology of company claims, or plan and supervise exploration and drilling projects. Many geologists assess soils and rock formations for the construction of highways and bridges. After acquiring experience in government or industry, some geologists work as private consultants or as executives for mining, exploration or petroleum companies.

Training and Qualifications

A minimum requirement for occupations in this field is a Bachelor of Science degree with a major in geology or a related field such as geophysics or mining engineering. In many cases, the completion of a master's or doctorate degree is also required. Memorial University offers degree programs in geology and geophysics and the bachelor, master's and PhD level. M.U.N. also offers a bachelor's program in geological/mining engineering.

Nature of Supply

The vast majority of geologists employed in the province have a university degree. All have some post-secondary education. As would be expected, the most common area of study is the physical sciences. While this occupation continues to be dominated by men, some women are entering the field. In 1971 there were no female geologists but by 1981 they accounted for four percent of employment. By 1986 the percentage had risen to 10 percent. The percentage of young people in this occupation fell dramatically in the early 1980s which may be a reflection of the relatively poor labour market circumstances facing graduates at that time. The fact that there are no older workers in this occupation suggests that many geologists move into managerial positions later in their careers. While their job may take them to remote areas of the province, most geologists reside in the St. John's Metro CEC area.

Job Prospects

The number of geologists employed in the province declined by 20 percent between 1981 and 1986. For the 1980s as a whole, employment is estimated to have experienced a slight decrease. This is not surprising given the recession of the early 1980s and the resulting negative impact on the mining sector. Prospects appear to be brighter in the 1990s however.

While by no means certain, the outlook for geologists over the projection period calls for above average growth. Some 50 positions are expected to open up by 1995. Most of these jobs will be new positions in the mining and business services sectors. Relatively few replacement positions are expected over this period.

While most geologists are employed on a year-round basis, some positions are seasonal. Those geologists involved in mineral exploration may experience some periods of unemployment during the winter months when exploration activity slacks off. The occupation is also sensitive to fluctuations in economic activity and movements in mineral prices. Given the number of people employed in the occupation, the number of U.I. beneficiaries is relatively low compared to most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 30,237
Highest 10% of Workers	N/A

Source: 1986 Census

Meteorologists 2114

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	40	14.3	0.1	1
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	10	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	1
Labrador	5	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	20	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	100	0
	1986	86	14	12	88	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (100)
- Federal (75)
- Provincial (25)

Meteorologists 2114

Job Environment

Meteorologists are involved in the study of climatic conditions for purposes of air pollution control and weather forecasting. Using sophisticated equipment, such as electronic computers, radar and satellites, they observe atmospheric processes and their effect on the earth. Much of this work has direct applications in agriculture, fire prevention and transportation.

Meteorologists also provide weather services, including ice and sea station forecasts, to the public and the aviation industry. In large weather centres, meteorologists work as part of a team of about five meteorologists and technicians. Individuals in this occupation may be required to work evenings, weekends and holidays.

Training and Qualifications

To enter this occupation, one should have either a bachelor's degree in meteorology or a bachelor's degree in physics, math or engineering plus a diploma in meteorology. A bachelor's degree in meteorology is not available in the Atlantic Province's, however, one could complete a bachelor's degree in one of the subject areas noted above at Memorial University and then complete the one-year diploma program in meteorology at Dalhousie University in Nova Scotia.

Nature of Supply

All meteorologists in the province have some form of post-secondary education with the most common area of study being the physical sciences. Although most meteorologists in the province are men, some women are entering the occupation. While the percentage of young people in the occupation increased between 1981 and 1986, it is still well below the proportion of young people in the labour force as a whole. This reflects the educational requirements for the position. Approximately half the meteorologists employed in the province are located in the Gander CEC area.

Job Prospects

The number of meteorologists in the province doubled between 1981 and 1986. Growth is estimated to have been well above average during the 1980s. This situation is not expected to carry over into the 1990's however.

Employment in this occupation is expected to show very little change over the projection period. Given the large employment increase that took place in the 1980s and the restrictions on spending presently facing various levels of government, the number of meteorologists in the province should remain stable. Given the age structure of the occupation, very few openings will arise due to retirement.

This occupation offers stable year-round employment and is not affected by fluctuations in economic activity. However, since the vast majority of meteorologists are employed by government, the occupation could be negatively affected by reductions in government spending. Given the low number of U.I. beneficiaries, it would appear that there are very few unemployed meteorologists in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 39,498
Highest 10% of Workers	N/A

Source: 1986 Census

Physical Science Technicians and Technologists 2117

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	275	3.1	1.9	50
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	120	6
Grand Falls	0	4
Stephenville	45	4
Corner Brook	15	4
Labrador	25	0
Harbour Grace	15	1
Clarenville	10	0
Marystown	0	0
Gander	15	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	76	24	40	60	0	98	2
	1986	75	25	35	65	0	99	1
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (58)
- Business (32)
- Education (24)
- Hospitals (2)

Public Administration (26)
- Provincial (16)
- Federal (10)

Manufacturing (10)
- Chemicals & Chemical Products (6)
- Pulp and Paper (4)

Physical Science Technicians and Technologists

2117

Job Environment

This group includes such diverse professionals as geological technicians, meteorological technicians, food technologists, assayers, hydrology technicians, and chemical technicians. Physical science technologists and technicians are frequently employed to assist physical scientists by carrying specialized tasks, such as performing experiments and testing results. For example, geological technicians may collect and prepare geological samples for analysis during field expeditions. Meteorological technicians may record and transmit detailed observations of atmospheric conditions.

Training and Qualifications

These occupations usually require high school graduation and the completion of a community college or university degree program depending on the specific requirements of the occupation. While high school graduation is the minimum requirement for meteorological technicians, applicants with post-secondary courses in physics and math are preferred. The Western Community College offers a two-year program in mineral technology. The Marine Institute offers a three-year program in food technology. The Nova Scotia Agricultural College offers a two-year program in chemistry laboratory technology.

Nature of Supply

Most physical science technologists and technicians employed in the province have either a university degree or technology program. The most common areas of study were physical sciences or engineering and applied science technology.

The percentage of women in this occupation remained relatively stable between 1981 and 1986 at one in four. While the percentage of young people declined slightly over this period, it is still in line with the provincial labour market average. The fact that there are no older workers in this occupation suggests that many physical science technologists move on to more senior positions later in their careers. About half the people employed in this occupational group reside in the St. John's Metro CEC area.

Job Prospects

The number of physical science technologists and technicians employed in the province increased by about 20 percent between 1981 and 1986. Employment growth during the 1980s is estimated to have been faster than the average for all occupations. While the occupation should continue to expand into the 1990s, the rate of growth is expected to be about average.

Some fifty job openings are expected in this occupational area over the projection period. Of these, just over half are expected to be new jobs that are created from economic expansion particularly in the business services sector. The remainder will arise as those currently in the positions retire or move on to other occupations.

Although most physical science technologists and technicians are employed on a year-round basis, some positions are seasonal. This is particularly true for geological technicians who may experience periods of unemployment in the winter months when exploration activity slows. For the most part this occupational group is not particularly sensitive to fluctuations in economic activity, however movements in mineral prices could affect demand for geological technologists and technicians. This would not be as great a concern for those technologists employed by various levels of government. They could be affected by reductions in government spending however. Given the size of this occupational group, the number of U.I. beneficiaries is relatively low compared to many other occupations in the province. Geological technicians account for about half of the beneficiaries in this group.

1985 Annual Earnings

Lowest 10% of Workers	$ 12,903 or less
Average Worker	$ 26,892
Highest 10% of Workers	$ 39,268 or more

Source: 1986 Census

Agriculturalists and Related Scientists

2131

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	98	-1.3	0.0	5
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	55	2
Grand Falls	10	0
Stephenville	5	0
Corner Brook	10	1
Labrador	0	0
Harbour Grace	0	0
Clarenville	5	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	82	18	0	100	0	100	0
	1986	88	12	15	85	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (61)
- Provincial (44)
- Federal (17)

Services (17)
- Accommodation & Food (11)
- Education (6)

Manufacturing (11)
- Pulp and Paper (11)

Agriculturalists and Related Scientists 2131

Job Environment

Agriculturalists study ways to improve livestock and vegetable farming, plant breeding, soil composition, water conservation and farm management. Several areas of specialization exist within this category. Agronomists try to increase crop yield and production by improving growth methods and controlling diseases, pests, and weeds. Horticulturists develop and improve orchard and garden plants and flowers by applying basic principles of plant biology. Soil scientists study the location, characteristics and composition of soils to improve soil management and conservation and to increase soil productivity. Animal scientists conduct controlled breeding research to produce high quality animal products using the most efficient rations and management practices available.

Training and Qualifications

These occupations require a bachelor's degree in agriculture or a related field. The Nova Scotia Agricultural College offers a four-year bachelor of science degree in agriculture. Master's and doctorate degrees are available at other universities in Canada.

Nature of Supply

All agriculturalists in the province have post-secondary education with about half having university degrees. The most common areas of study are agricultural and biological sciences/technologies, and engineering and applied sciences. Just over half the agriculturalists in the province reside in the St. John's Metro CEC area.

The percentage of women in this occupational area increased in the 1970s but declined somewhat between 1981 and 1986. The proportion of young people in this occupation increased significantly over this period but is still below the provincial labour market average. This is a reflection of the educational requirements for the position. The fact that there are no older workers in this occupational area suggests that many agriculturalists move on to more senior or supervisory positions later in their careers.

Job Prospects

The number of agriculturalists employed in the province declined slightly between 1981 and 1986 and growth in the occupation is estimated to have been negative during the 1980s. Increases in the number of agriculturalists employed in agriculture, pulp and paper and the provincial government was more than offset by declines in forestry and the federal government.

Employment in this occupation is expected to remain stable over the projection period. This view is consistent with the outlook for industries in which the occupation is employed, and in particular with the government sector where a large number of agriculturalists are concentrated. A few replacement openings should become available over the period however.

Most positions in this occupational area are year-round but a small proportion are seasonal. As such, some agriculturalists may be unemployed over the winter months. Since such a large percentage of agriculturalists are employed by government the occupation is not particularly sensitive to fluctuations in economic activity. Demand could be negatively affected by reductions in government spending however. Compared with other occupations, the number of U.I. beneficiaries in this occupation is very low.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 29,382
Highest 10% of Workers	N/A

Source: 1986 Census

Biologists

2133

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	181	0.8	0.5	20
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	135	1
Grand Falls	15	0
Stephenville	0	0
Corner Brook	15	0
Labrador	0	0
Harbour Grace	10	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	84	16	0	100	0	95	5
	1986	85	15	11	89	0	93	7
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (65)
- Provincial (44)
- Federal (18)
- Local (3)

Services (21)
- Education (18)
- Business (3)

Fishing & Trapping (6)

Biologists

2133

Job Environment

Biologists, who work in zoology, the study of animals, and botany, the study of plants, include anatomists, biochemists, ecologists (or environmental biologists), entomologists, fishery biologists, geneticists, limnologists, medical bacteriologists, microbiologists, neurobiologists, oceanographers, pathologists, pharmacologists, physiologists, plant physiologists and zoologists. Theoretical or research biologists usually divide their time between fieldwork, collecting information on living and fossil organisms, and laboratory research. Applied biologists may inspect food and drugs, conduct surveys on wildlife, fisheries and forests, and advise on management and control. In biotechnological research, specialists combine science and engineering in activities such as the application of plant and animal cells in the production of new pharmaceutical or industrial products.

Training and Qualifications

An undergraduate degree in biology is the minimum qualification for these occupations. For some positions involving research, a master's or doctorate degree may be required. Memorial University offers degree programs in biology at the bachelor, master's and doctorate level.

Nature of Supply

The vast majority of biologists in the province have a university degree. As would be expected, the most common area of study is biology. After rising in the 1970s, the proportion of women in the occupation levelled off at 15 percent in the early 1980s. A significant number of young people entered this occupation over this period. Many biologists move on to managerial positions later in their careers, opening up positions for new entrants into the occupation. This is why there are relatively few older workers in the occupation. Roughly three out of four biologists in the province reside in the St. John's Metro CEC area.

Job Prospects

The number of biologists employed in the province showed very little change between 1981 and 1986. Employment growth during the 1980s is estimated to have been slightly below average. The large increase in the number of biologists employed by the provincial government was offset by reductions in other industries.

Employment growth in this occupational area is expected to be below average over the projection period. This is not surprising given the large number of biologists employed by government where employment levels are expected to remain relatively stable. Of the 20 job openings expected by 1995, three quarters will arise as existing positions become vacant. The number of new positions is expected to be limited.

Biologists enjoy stable year-round employment and since such a large percentage are employed by government, the occupation is not particularly sensitive to fluctuations in economy activity. Reductions in government spending could adversely affect the occupation however. The stable nature of employment is reflected in the extremely low number of U.I. beneficiaries in the occupation.

1985 Annual Earnings

Lowest 10% of Workers	$ 21,413 or less
Average Worker	$ 36,966
Highest 10% of Workers	$ 57,239 or more

Source: 1986 Census

Life Sciences Technologists and Technicians 2135

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	164	-2.6	0.2	12
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	105	7
Grand Falls	5	2
Stephenville	10	0
Corner Brook	15	2
Labrador	0	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	0	0
Gander	5	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	69	31	56	44	0	95	5
	1986	81	19	32	65	3	98	2
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (55)
- Provincial (38)
- Federal (17)

Forestry (24)

Services (10)
- Education (7)
- Hospitals (3)

Life Sciences Technologists and Technicians

2135

Job Environment

This group performs specialized tasks for life scientists, and includes forest technologists/technicians, agricultural technologist, aquaculture technologist and biological laboratory technologists. Their work may range from laboratory experimentation and operation of special test equipment, to preparation of specifications, writing scientific reports and outdoor field work.

Training and Qualifications

Individuals interested in these occupations should complete a community college program or a university degree. The Fisher Institute offers a two-year program in forest resources technology. The Marine Institute offers a one-year post diploma/degree program in aquaculture for those who have completed a community college or university degree program of three years duration or longer. Training in agriculture technology and biology laboratory technology is available at the Nova Scotia Agricultural College. A bachelor of science program in biology at Memorial University takes four years to complete including the first year of general studies.

Nature of Supply

Most people in this occupational area have either a university degree or an institute of technology diploma. Reflecting the wide diversity of this group, they have several different areas of study, the largest being agricultural and biological sciences. Other areas included engineering and engineering technologies as well as health technologies. Roughly 70 percent of life sciences technologists and technicians reside in the St. John's Metro CEC area.

After increasing significantly in the 1970s, the proportion of women in this occupational group declined slightly between 1981 and 1986. This may be related to the employment loss for the group as a whole over this period. The percentage of young people also declined by a large margin. The low number of people in the group over the age of 55 suggests that many life science technologists move on to more senior positions later in their careers.

Job Prospects

The number of people employed in this occupational area declined by over 30 percent between 1981 and 1986. While opportunities for technologists increased in forestry and the provincial government, they were more than offset by losses in agriculture, fishing, education, business services and the federal government. Employment for the decade is estimated to have declined by over 2 percent per year.

The outlook for the early 1990s calls for below average growth in this occupational area. This view is consistent with the employment outlook for government, forestry and community services, where many life science technologists and technicians are employed. Opportunities that do arise will mainly stem from jobs vacated by people leaving the work force as opposed to new positions resulting from growth.

Most occupations in this group enjoy stable year-round employment and are not affected by seasonal factors. Since relatively few people in this group are employed in the private sector, employment levels are not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries in this occupational area compares favourably with many other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 28,648
Highest 10% of Workers	N/A

Source: 1986 Census

Occupations in Life Science - Forestry 2139

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	140	9.5	0.7	5
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	25	6
Grand Falls	10	0
Stephenville	15	0
Corner Brook	35	0
Labrador	0	0
Harbour Grace	0	1
Clarenville	0	1
Marystown	5	0
Gander	15	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	93	7	70	30	0	92	8
	1986	95	5	13	84	3	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (43)
- Provincial (33)
- Federal (5)
- Local (5)

Forestry (33)

Manufacturing (24)
- Pulp and Paper (24)

Occupations in Life Science - Forestry

2139

Job Environment

Foresters are responsible for all aspects of forest management. They plan economical ways to cut timber; organize forest replanting; study the effects of light, weather and soil on tree growth; and protect trees from fire, insects, pests and disease. They are often called upon to give advice to industry, government and the general public. This may include providing educational programs on forest care.

Forestry technicians have more direct supervisory responsibilities than foresters. Other duties include managing timber sales and estimating amounts of standing timber or levels of future growth.

Training and Qualifications

Individuals require a four-year undergraduate degree in forestry to become a forester or a community college diploma to become a forestry technician. A bachelor's degree in forestry is offered at the University of New Brunswick. Students who have completed the pre-forestry program at Memorial University are admitted to University of New Brunswick forestry program with advanced standing. The Fisher Institute offers a two-year program in Forest Resources Technology.

Nature of Supply

Most people in these occupations have either an institute of technology diploma or a university degree. The most common areas of study are the applied sciences or applied sciences technology. These forestry occupations are concentrated in the western and central regions of the province and in the St. John's area.

This occupational area continues to be male dominated with women accounting for only five percent of employment. The percentage of young people in the occupations dropped dramatically between 1981 and 1986. This may reflect a desire on the part of employers for better educated employees. The small proportion of older workers in this category suggests that many forest related workers move on to other occupations later in their careers.

Job Prospects

Employment in this occupational area increased by 75 percent between 1981 and 1986 as the forestry, pulp and paper, and provincial government sectors all increased the number of foresters and forestry technicians they employ. Growth for the decade is estimated to have been well above average. This strong performance is not expected to be maintained into the 1990s however. Employment growth is expected to be below average over the projection period. This view is based on the employment outlook for the government, forestry, and pulp and paper industries where these occupations are concentrated. Growth in the province's forestry industry is limited by a shortage of raw material. One potential growth area is silviculture or reforestation.

This occupational group and in particular forest technicians, may experience periods of unemployment during the winter months when forest activity slows. However, these occupations are not particularly sensitive to fluctuations in economic activity as other forestry related occupations would be. The low number of U.I. beneficiaries in this occupational area in September would be considerably higher in the winter months, reflecting the seasonal nature of employment for forest technicians.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 31,206
Highest 10% of Workers	N/A

Source: 1986 Census

Architects 2141

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	40	0.0	3.7	15
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	40	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	88	12
	1986	100	0	13	75	12	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (71)	Public Administration (29)
- Business (71)	- Federal (14) - Provincial (14)

Architects 2141

Job Environment

Architects design houses, buildings and other structures, integrating artistic, social, economic and environmental principles. This occupational group also includes naval architects, who design boats and ships, and landscape architects, who design parks and recreation areas. Design work requires close consultation with clients and planning officials, while construction requires architects to collaborate with builders, contractors and construction managers, sometimes even on site, to ensure compliance with specifications.

Training and Qualifications

Students who have completed two years of university in any program of study with at least one math course can apply for admission to the three-year architecture program offered at the Technical University of Nova Scotia. Graduates of this program must then complete two years of work experience under the supervision of a registered architect to be eligible for registration with the provincial association.

Nature of Supply

All architects in the province have some type of post-secondary education with most having a university degree. The most common area of study is engineering and applied sciences. Architects are concentrated in the St. John's Metro CEC area.

This occupation continues to be dominated by men. As of 1986 there were still no female architects in the province. The proportion of young people in the occupation increased significantly between 1981 and 1986 but is still well below the provincial labour market average. This is a reflection of the time it takes to complete the educational requirements for the position. The higher than average percentage of older workers in the occupation should lead to a number of job opportunities as these workers retire.

Job Prospects

While the number of architects employed in the province increased slightly between 1981 and 1986, the occupation is still relatively small. Employment growth is estimated to have been below average in the 1980s. The situation is expected to improve in the 1990s however.

This occupation should experience above average employment growth over the projection period. This view is consistent with the outlook for the construction industry in the province. Although architects will not benefit directly from the Hibernia oil development, increased activity in residential, commercial and institutional construction spurred on by the development will enhance the opportunities for the profession. While the expected number of job openings may seem small, it is significant given the size of the occupation. Roughly half the openings should result from increased activity with the other half arising as older architects retire.

Employment in this occupation is not significantly affected by seasonal factors but is particularly sensitive to fluctuations in economic activity as it affects the construction industry. Junior architects and architects in training could experience periods of unemployment during economic recessions when construction activity slows. The low number of U.I. beneficiaries in the occupation is a reflection of the generally favourable labour market conditions facing architects in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 42,763
Highest 10% of Workers	N/A

Source: 1986 Census

Civil Engineers 2143

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	565	0.5	3.5	137
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	325	8
Grand Falls	35	0
Stephenville	20	0
Corner Brook	45	0
Labrador	25	0
Harbour Grace	15	1
Clarenville	15	0
Marystown	20	2
Gander	10	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	5	90	5	98	2
	1986	97	3	9	85	6	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (37)
- Business (34)
- Education (2)

Public Administration (27)
- Provincial (20)
- Federal (4)
- Local (3)

Manufacturing (14)
- Pulp & Paper (7)
- Fish Products (2)
- Chemical & Chemical Products (2)

Civil Engineers

2143

Job Environment

Civil engineers design and supervise the construction of buildings and other structures. Specialties within civil engineering include structural design, construction, transportation road and highway, pollution control and municipal engineering. Civil engineers determine the strength and other qualities required of the structures they design. They develop the specifications and procedures to be followed during construction. During design construction or maintenance work, they confer with clients, architects and construction personnel regarding project requirements. They inspect and test existing structures (e.g., bridges and tunnels) to ensure safety and proper operation. They may have to work prolonged hours during the course of a major project or during emergencies. Civil engineers work in an office environment, but often spend time out-of-doors at construction sites.

Training and Qualifications

To become a civil engineer, one should complete a university degree program in civil engineering. After two years of relevant work experience one is eligible for registration with the Association of Professional Engineers of Newfoundland. Memorial University offers bachelor and masters degrees in civil engineering.

Nature of Supply

The vast majority of civil engineers in the province have some type of post-secondary education with most having a university degree. As would be expected, engineering is the most common area of study. Approximately two out of three civil engineers in the province reside in the St. John's Metro CEC area but the profession is represented in all areas of the province.

Although most of Newfoundland's civil engineers are male, women are beginning to enter the occupation. The lower than average proportion of young people in the occupation reflects the time needed to complete the formal educational requirements. Many civil engineers move into management positions later in their careers. This is reflected in the low percentage of older workers in the occupation.

Job Prospects

The number of civil engineers in the province declined slightly between 1981 and 1986 and growth in the occupation is estimated to have been below average during the 1980s. The large increase in employment in the provincial government was more than offset by declines in construction and in the federal government. The number of civil engineers employed in business services (mainly engineering consulting firms) remained unchanged.

Employment growth in this occupational area is expected to be above average over the projection period. Demand will be particularly strong in the next few years as engineering work related to the Hibernia project is carried out. Even when the direct engineering work related to Hibernia has been completed, the profession will benefit from the increased level of general construction activity spurred on by the development. As such, most job openings over this period will be new positions resulting from increased activity. A relatively small proportion of openings will be due to vacancies created by retirement or career changes.

For the most part, civil engineers are employed on a year-round basis although a small percentage may experience periods of unemployment during the winter months when construction activity slows. The occupation is highly dependent on the level of construction activity so some positions, particularly in the private sector, may be vulnerable during economic downturns when construction activity falls off. The very low level of U.I. beneficiaries in this occupation is indicative of the favourable labour market currently facing civil engineers in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 24,764 or less
Average Worker	$ 37,519
Highest 10% of Workers	$ 51,737 or more

Source: 1986 Census

Electrical Engineers 2144

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	387	-2.5	0.3	30
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	220	4
Grand Falls	5	0
Stephenville	15	0
Corner Brook	40	0
Labrador	20	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	5	0
Gander	10	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	97	3	10	85	5	99	1
	1986	100	0	4	93	3	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (55)
- Electric Power (28)
- Telecommunications (23)
- Radio & TV Broadcasting (3)

Manufacturing (19)
- Pulp and Paper (8)
- Food and Beverage (6)
- Miscellaneous (3)

Services (14)
- Business (8)
- Education (3)
- Hospitals (2)

Electrical Engineers 2144

Job Environment

Electrical engineering incorporates the two main specialties of electrical power and electronics engineering. Electronics engineers are involved with telecommunications, control systems, computers, navigation systems, electronic circuits and avionics. They seek cost-effective solutions to the design, production and maintenance of electronic apparatus. They also discuss technical matters with management, confer with colleagues, direct the work of others and participate on multi-disciplinary teams. Engineers specializing in electric power are concerned with its generation and distribution. They are involved with the design of generating, transmission and distribution systems, and with operations and maintenance. They must work with management and with other technical and trades staff.

Work may be in an office, on a factory floor or outdoors. Although the physical demands of the work are light, electrical engineers may be exposed to hazards and therefore must be aware of safety measures.

Training and Qualifications

To become an electrical engineer, one should complete a university degree program in electrical engineering. After completing two years of relevant work experience one is eligible for registration with the Association of Professional Engineers of Newfoundland. Memorial University offers degree programs in electrical engineering at the bachelor, masters and doctoral levels.

Nature of Supply

Nearly all electrical engineers in the province have some type of post-secondary education with most having a university degree. The most common areas of study are engineering and engineering technology. Approximately two out of three electrical engineers in the province reside in the St. John's Metro CEC area.

Surprisingly, the percentage of women in this male-dominated occupation actually declined between 1981 and 1986. So too did the proportion of young people in the occupation. This may be related to the decrease in employment experienced by electrical engineers over this period. The small percentage of electrical engineers aged 55 and over suggests that many move on to managerial positions later in their careers.

Job Prospects

As mentioned above, this occupation experienced employment losses in the early 1980s. Electrical engineers in the electric power and business services (ie., engineering consulting companies) sectors were the most seriously affected. Estimated employment growth for the decade as a whole was negative.

Employment growth in this occupational area is expected to be below average over the projection period. This view is consistent with the employment outlook for the electric power, telecommunications and manufacturing sectors where a majority of electrical engineers are employed. Most of the job openings expected by 1995 will be vacancies created when those currently employed as electrical engineers retire or move on to managerial positions. Relatively few positions are expected to come about as a result of increased economic activity. However, should the Lower Churchill Hydro Development proceed within this timeframe, demand for electrical engineers would be considerably stronger than projected here.

This occupation is not subject to seasonal factors and is only mildly sensitive to fluctuations in economic activity. Given the size of this occupation, the very low number of U.I. beneficiaries reflects the relatively attractive labour market for electrical engineers compared to most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 24,495 or less
Average Worker	$ 36,087
Highest 10% of Workers	$ 46,304 or more

Source: 1986 Census

Mechanical Engineers 2147

Employment Trends	**Number of Jobs 1990**	**Average Annual Growth Rates (%) Estimated 1981 - 1990**	**Average Annual Growth Rates (%) Projected 1990 - 1995**	**Number of Job Openings 1990 - 1995**
This Occupation	217	7.1	3.8	60
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	110	5
Grand Falls	0	1
Stephenville	0	2
Corner Brook	20	2
Labrador	20	0
Harbour Grace	10	0
Clarenville	0	1
Marystown	10	0
Gander	10	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	93	7
	1986	100	0	3	86	11	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (27)
- Food and Beverage (11)
- Pulp and Paper (5)
- Non Metalic Minerals (5)

Services (27)
- Business (24)
- Education (3)

Trade (11)
- Wholesale (11)

Mechanical Engineers 2147

Job Environment

Mechanical engineers design and develop machinery and systems for manufacturing and materials processing, transportation, power generation and a multitude of other applications. They are also employed to oversee the installation, operation and maintenance of mechanical systems. Common specialties in mechanical engineering include environmental control in the heating, ventilation and air conditioning of buildings, noise control and energy management, production engineering and aerodynamics. These jobs may also include supervisory and management duties, such as preparing cost and scheduling estimates; developing maintenance schedules and programs; investigating maintenance problems and mechanical failures; preparing contracts and evaluating tenders for industrial construction; and supervising other technical staff. The work of mechanical engineers is frequently in or near an industrial environment, but much is in an office setting.

Training and Qualifications

To become a mechanical engineer one should complete a university degree in mechanical engineering. After two years of relevant work experience one is eligible for registration with the Association of Professional Engineers of Newfoundland. Memorial University offers degree programs in mechanical engineering at the bachelors and masters level.

Nature of Supply

All mechanical engineers in the province have some form of post-secondary education and most have either a university degree or an institute of technology diploma. As would be expected, the most common areas of study are engineering and engineering technology. Approximately 60 percent of mechanical engineers in the province reside in the St. John's Metro CEC area.

This occupation continues to be totally dominated by men. The small percentage of young people in the occupation is a reflection of the time it takes to acquire the necessary education. The increase in the percentage of older workers in the occupations suggests that many may be approaching retirement age.

Job Prospects

Employment in this occupation increased by over 50 percent between 1981 and 1986 as the manufacturing, mining and business services sectors increased the number of mechanical engineers they employ. The increase in the number of mechanical engineers employed in the province in the 1980s is estimated to have been well above average.

The outlook for this occupation calls for above-average growth over the projection period. This view is consistent with the employment outlook for manufacturing, business services and wholesale trade where many mechanical engineers are employed. About three quarters of the job openings expected by 1995 will be new positions resulting from increased economic activity. The remainder will be replacement positions that become vacant as those currently in the positions retire or move on to managerial positions.

Mechanical engineers are not affected by seasonal factors nor are they particularly sensitive to fluctuations in economic activity. Given the size of the occupation, the low number of U.I. beneficiaries compares favourably with most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 23,485 or less
Average Worker	$ 38,245
Highest 10% of Workers	$ 51,215 or more

Source: 1986 Census

Mining Engineers

2153

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	28	-8.9	1.4	7
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	5	0
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	10	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	100	0
	1986	100	0	20	80	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Mining (100)
- Metals (60)
- Non-metals (20)
- Mining Services (20)

Mining Engineers

2153

Job Environment

Specialists in this group include design engineers, mine exploration engineers, mine production engineers, mineral engineers and mine safety engineers. Their activities involve surveying mineral deposits and ore bodies to determine whether mining is commercially viable, deciding on the best method of mining, planning and designing appropriate mining facilities, overseeing the construction of mine shafts or pits, and choosing the extraction processes. Decisions are made with a view to efficiency, economy and safety.

Mining engineers deal with management, direct the work of others and confer with fellow engineers and technicians. They work in an office environment and at mine sites. Positions in this occupation are often located in isolated communities.

Training and Qualifications

To enter this occupation, one should complete a university degree in mining engineering. After two years of relevant work experience, one is eligible for registration with the Association of Professional Engineers of Newfoundland. Memorial University offers a bachelors degree program in geological/mining engineering.

Nature of Supply

Most mining engineers in the province have a university degree in engineering. As with some of the other engineering disciplines, this occupation continues to be dominated by men. While the percentage of young people in the occupation increased between 1981 and 1986, the actual number of people was rather small. However, the fact that any young people were able to enter the occupation is rather surprising given the large decline in the number of mining engineers employed in the province over this period. Mining engineers were located in Labrador and in the St. John's Metro CEC area.

Job Prospects

Employment in this occupation declined by 70 percent between 1981 and 1986. The mining sector was hit hard by the recession of the early 1980s and employment levels have never fully recovered. Growth for the decade is estimated to have been negative.

The number of mining engineers employed in the province is expected to increase over the projection period but at a slightly lower rate than the average for all occupations. This view is based on the employment outlook for the mining sector where mining engineers are employed. Most of the job openings that arise by 1995 will be replacement positions that come about as those currently in the positions retire or move on to managerial jobs.

This occupation is not affected by seasonal factors but as with other mining occupations, it is sensitive to fluctuations in economic activity particularly when mineral prices are affected. Some positions in this occupation may be vulnerable during economic downturns.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 31,093
Highest 10% of Workers	N/A

Source: 1986 Census

Petroleum Engineers 2154

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	29	1.7	13.6	27
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	30	0
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	5	0
Marystown	0	0
Gander	5	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	80	20	0	100	0	100	0
	1986	100	0	0	100	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Mining (83)
- Petroleum & Gas (50)
- Mining Services (33)

Public Administration (17)
- Federal (17)

Petroleum Engineers 2154

Job Environment

Petroleum engineers work at finding oil and gas deposits, determining their size and quality, and deciding on the best methods for extraction. They are involved in all aspects of the petroleum industry, from exploration and recovery to refining and distribution. Their work requires the practical application of the principles of physics, chemistry and geology and involves extensive calculations, cost estimates, design work, scheduling and supervision. Petroleum engineering specialties include drilling, reservoir management, production engineering and pipeline engineering. Petroleum engineers do much of their work at drill sites or processing plants, which are often located in isolated areas; as they accumulate experience they do more work in an office environment.

Training and Qualifications

To enter this occupation, one should complete a university degree program in petroleum engineering or a related discipline. After two years of relevant work experience, one is eligible for registration with the Association of Professional Engineers of Newfoundland. Memorial University does not offer a program in petroleum engineering but does offer degree programs in several other engineering disciplines. Degree programs in petroleum engineering at the bachelors, masters and doctoral levels are available at the University of Alberta.

Nature of Supply

The vast majority of petroleum engineers in the province have a university degree. The most common areas of study are engineering and applied science, and the physical sciences. Most petroleum engineers in the province reside in the St. John's Metro CEC area. The percentage of female petroleum engineers declined between 1981 and 1986 despite an increase in overall employment levels in the occupation. The lack of young people in the occupation is a reflection of the lengthy period of time it takes to acquire the necessary education. The average age of petroleum engineers in the province is well below the all occupation average however.

Job Prospects

The number of petroleum engineers employed in the province increased significantly between 1981 and 1986. The rise coincided with an increase in oil exploration activity over the period. Since then, oil exploration off the Newfoundland coast has tapered off with only one well drilled in 1990. As a result, the number of petroleum engineers employed in the province declined.

This occuaption should experience employment growth well in excess of the provincial labour market average. This view is consistent with the employment outlook for the petroleum and gas, and mining services sectors where this occupation is concentrated. While petroleum engineers are not heavily involved in the construction phase of the Hibernia project, their involvement will increase significantly as the development moves toward the production phase and then into production in 1996. Should a subsequent field be developed over this period or if exploration activity were to increase significantly, the demand for petroleum engineers would exceed what is projected here. Given the relatively young age profile of those presently in the occupation, the number of replacement positions is expected to be low however.

This occupation is not significantly affected by seasonal factors but is strongly influenced by fluctuations in economic activity in general and by oil and gas prices in particular. This is because exploration and production decisions often hinge on oil company profitability and expectations regarding future price movements. Despite a decrease in demand for the occupation in recent years, the lack of U.I. beneficiaries suggests that there is no excess supply of petroleum engineers in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 58,735
Highest 10% of Workers	N/A

Source: 1986 Census

Community Planners 2157

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	89	5.1	1.3	27
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	50	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	20	0
Labrador	5	0
Harbour Grace	0	0
Clarenville	5	0
Marystown	10	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	N/A	N/A	N/A	N/A	N/A
	1986	79	21	17	83	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (50)
- Provincial (33)
- Local (11)
- Federal (6)

Services (39)
- Business (17)
- Education (11)
- Recreation (6)

Transport, Communications and Utilities (6)
- Telecommunications (6)

Community Planners

2157

Job Environment

Community planners design programs and plans for the use of land and the orderly development of urban communities. They analyze demographic, economic and social characteristics and formulate medium- and long-term objectives and plans regarding land use and infrastructure development. They confer with government authorities, civic leaders and other specialists in determining policies for land use and development. They are concerned with issues such as zoning patterns, transportation routing and capacity, public utilities, parks and recreational facilities, public and private housing, and the prevention of soil erosion and pollution. They work in an office environment.

Training and Qualifications

The recommended path to this occupation is an undergraduate degree in planning or an undergraduate degree in a related discipline such as geography followed by a graduate degree in planning. Memorial University does not offer a degree program in planning but does offer bachelors and masters degrees in geography. A masters degree in urban and rural planning is available at the Technical University of Nova Scotia.

Nature of Supply

Nearly all community planners in the province have some form of post-secondary education with most having a university degree. The most common areas of study are social sciences and engineering technologies. The number of women in the occupation has been increasing. By 1986, one in five community planners in the province was female. The less than average proportion of young people (15-24) in the occupation is a reflection of the lengthy training requirements to enter the profession. Many community planners move on to positions in management and government administration later in their careers. This may explain why there are no planners in the 55 and over age group. Just over half the community planners in the province are located in St. John's CEC area. A significant number can also be found in the Corner Brook CEC area.

Job Prospects

The number of community planners employed in the province doubled between 1981 and 1986. Increases were recorded in business services, telecommunications, and education among other industries. The number of planners employed by the various levels of government was relatively unchanged. With an estimated average annual growth rate of 5 percent, employment in this occupation expanded at a faster than average pace during the 1980s.

In contrast to the previous decade, employment growth in this occupational area is expected to be slightly below average over the projection period. This view is based on the outlook for sectors which employ planners, most notably the various levels of government and business services. Relatively few of the openings that become available by 1995 will be new positions but rather replacement openings that arise as those presently in the positions retire or move on to more senior positions.

These positions are not influenced by seasonal factors and are not significantly affected by fluctuations in economic conditions. This is reflected in the very low number of U.I. beneficiaries in the occupation. Planners employed by consulting firms in the business services sector may experience periods of unemployment or reduced income during economic contractions however.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 34,442
Highest 10% of Workers	N/A

Source: 1986 Census

Surveyors 2161

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	336	0.0	3.4	81
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	145	19
Grand Falls	15	1
Stephenville	0	4
Corner Brook	55	9
Labrador	5	0
Harbour Grace	10	4
Clarenville	30	5
Marystown	0	0
Gander	25	3

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	96	4	36	64	0	89	11
	1986	100	0	15	79	6	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (34)
- Business (34)

Construction (25)

Public Administration (22)
- Provincial (15)
- Federal (3)
- Local (3)

Surveyors

2161

Job Environment

This category includes land surveyors, engineering surveyors, mine surveyors, topographical surveyors, hydrographers and geodetic surveyors. They determine and define boundaries, elevations, contours and waters for map-making, construction, mining and other purposes. They use specialized measuring devices and instruments, such as theodolites, transits, levels and computerized devices incorporating lasers.

Surveying work is precise and detailed, and technological innovations are allowing more accurate and faster measurements to be made. Computers help in analyzing measurements taken in the field and in draughting maps and charts. Electronic distance measuring devices and global positioning satellites permit accurate study of the earth in geodetic surveys.

The largest occupation in this group is land surveying. While some land surveyors work and live in urban areas, others live in camps (sometimes shared with construction crews) while working in remote construction or exploration sites. Many surveyors choose their occupation out of a desire to work in wilderness areas.

Surveyors usually are employed by construction firms, governments, or specialist engineering or surveying firms. Licensed land surveyors are often self-employed and operate their own surveying businesses.

Training and Qualifications

This occupation requires the completion of either a community college program or university degree in surveying. The Cabot Institute offers a three-year program in surveying engineering technology. Graduates of this program who wish to undertake further study can receive a number of credits towards a bachelors degree in surveying engineering offered at the University of New Brunswick.

Nature of Supply

Most surveyors in the province have some form of post-secondary education, usually an institute of technology diploma or a trades certificate. A small percentage of surveyors in the province do have university degrees however. The most common area of study is engineering technologies and trades.

This occupation is male dominated. The large decline in the number of young people in the occupation between 1981 and 1986 may be a reflection of the relatively poor employment prospects for new entrants into the occupation over this period. While the percentage of older workers (55+) increased during this time, it is still fairly common for surveyors to move on to other occupations such as draughtspersons, supervisors or managers later in their careers. Roughly half the surveyors in the province are located in the St. John's Metro CEC area with the remainder spread fairly evenly around the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986. The federal government, business services and electrical utilities sectors all employed fewer surveyors over this period while the number employed in the construction industry and with the provincial and municipal governments increased slightly. Employment is estimated to have been relatively stable for the decade as a whole however.

This occupation should experience above average employment growth to 1995 based on the outlook for the business services and construction sectors where many surveyors are employed. The number of surveyors employed by the various levels of government is expected to be relatively stable over this period. Most of the job openings expected in this occupation over the projection period will be new positions brought about by increased economic activity. Relatively few replacement positions are expected given the young average age of those in this group.

Many positions in this occupation are seasonal with peak employment occurring during the summer months when construction activity is at its highest. During the winter months, the number of U.I. beneficiaries in this occupation is typically four times higher than reflected on the opposite page. Surveying is also sensitive to fluctuations in economic activity and periods of unemployment can be expected during economic recessions when construction activity usually slows.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,281 or less
Average Worker	$ 27,267
Highest 10% of Workers	$ 35,724 or more

Source: 1986 Census

Draughting Occupations

2163

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	396	2.6	3.6	114
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	255	23
Grand Falls	25	4
Stephenville	0	0
Corner Brook	25	0
Labrador	10	0
Harbour Grace	15	1
Clarenville	5	5
Marystown	10	2
Gander	10	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	76	24	41	59	0	95	5
	1986	80	20	21	78	1	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (48)
- Business (42)
- Education (6)

Public Administration (23)
- Provincial (16)
- Federal (7)

Manufacturing (12)
- Pulp and Paper (4)
- Shipbuilding (3)
- Metal Fabricating (2)

Draughting Occupations

2163

Job Environment

A draughtsperson prepares detailed drawings from sketches and specifications. Draughtspersons produce maps, charts, plans, graphical presentations and drawings of manufactured products, buildings and other structures as specified by technical experts such as architects and engineers. Draughtpersons work at specialized computer work stations, usually as a member of a design team. The use of computer-assisted-design techniques is rapidly replacing traditional manual draughting methods. Draughting is done in an office environment, commonly following a 35-40 hour work week.

Training and Qualifications

This occupation requires the completion of a community college program in draughting or a related field such as architectural engineering technology or civil engineering technology. The Western Community College offers a two-year program in computer-aided draughting. The Central Community College offers a nine-month program in basic draughting. Graduates of this program are eligible for the nine-month program in computer-aided draughting also offered at the Central Community College. A three-year program in architectural engineering technology is available at the Cabot Institute. The first year of this program can be completed at the Fisher Institute, the Avalon Community College or the Eastern Community College. Both the Cabot Institute and the Fisher Institute offer three-year programs in civil engineering technology. The first year of this program can also be completed at some community colleges.

Nature of Supply

Virtually all draughtpersons in the province have some type of post-secondary education with the most common being a community college diploma or an institute of technology program. A small percentage have a university degree. Their most common area of study is engineering technologies and trades. In 1986, one out of five draughtpersons in the province was female, compared to one in four in 1981. The proportion of young people in this occupation declined dramatically over this period to equal the overall average. The lack of older workers in the occupation suggests that many draughtpersons move on to supervisory positions or other occupations later in their careers. While many draughtpersons reside in the St. John's Metro CEC area, the occupation is represented in most areas of the province.

Job Prospects

Employment in this occupation increased by 30 percent between 1981 and 1986. Most of the increase occurred in business services (engineering consulting firms) and in the federal government. The number of draughtpersons employed in other sectors showed little change over this period. At 2.6 percent, average annual employment growth is estimated to have been well above average in the 1980s.

Employment growth should continue to be above average over the projection period. This view is based on the outlook for business services (engineering firms) shipbuilding and metal fabricating, all of which stand to benefit from the Hibernia project. The number of draughtpersons employed by the various levels of government is expected to show little change over this period. The number of replacement positions will be limited given the relatively young average age of the occupation.

The increasing adoption of computer-aided design (CAD) will have a significant impact on draughting occupations. This technology provides three dimensional visualization and facilitates the design of complex shapes and machine assemblies. These changes have eliminated many repetitive tasks and will demand better design skills, more sophisticated graphics, and greater design accuracy of the draughtperson. These changes in technology have greatly increased the volume of work that can be produced by a single draughtperson and may dampen somewhat the strong employment growth projected above. However, the employment outlook remains attractive for those with training in the newer draughting technologies.

Given the types of industries that employ draughtpersons, the occupation is fairly sensitive to changing economic conditions. Some positions, particularly in the private sector, may experience spells of unemployment during periods of economic recession. Relative to employment, the number of U.I. beneficiaries in this occupation is below the labour market average, reflecting the relatively attractive labour market situation facing draughtpersons in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 16,452 or less
Average Worker	$ 27,181
Highest 10% of Workers	$ 39,309 or more

Source: 1986 Census

Architectual Technologists and Technicians 2164

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	22	1.1	11.0	15
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	15	2
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	5	0
Gander	0	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	N/A	N/A	N/A	N/A	N/A
	1986	75	25	25	75	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (50)
- Education (25)
- Accommodation & Food (25)

Manufacturing (25)
- Shipbuilding (25)

Public Administration (25)
- Provincial (25)

Architectural Technologists and Technicians 2164

Job Environment

Architectural technologists and technicians work with architects and civil engineers engaged in building design. They conduct research, and prepare drawings, architectural models, specifications and contracts relating to construction projects. Architectural technicians and technologists are employed by architectural and construction firms, governments and large firms which supervise their own building activities. They often supervise construction projects and coordinate and inspect work done by others.

Training and Qualifications

Those interested in this occupation should complete a community college program in architectural technology. The Cabot Institute offers a three-year program in architectural engineering technology. The first year of this program can be completed at the Fisher Institute, the Avalon Community College or the Eastern Community College. The Marine Institute offers a three-year program in naval architecture technology.

Nature of Supply

Most architectural technologists and technicians in the province have graduated from an institute of technology program in engineering technology. A small percentage have a community college diploma. Women have increased their representation in the occupation. By 1986, one out of four architectural technologists was female. A slightly higher than average proportion of technologists were in the younger age group (under 25) and none were in the older age category. Employment in the occupation is split between the St. John's and Marystown CEC areas.

Job Prospects

This extremely small occupational group showed no change in employment levels between 1981 and 1986. At just over one percent, average annual employment growth in the 1980s is estimated to have been roughly in line with the provincial labour market average. This situation should improve significantly in the 1990s.

Employment growth in this occupation is expected to be well in excess of the provincial labour market average over the projection period. The occupation should benefit from the development of the Hibernia oil field and related activity, which will increase employment levels in business services (ie., engineering firms), shipbuilding and possibly metal fabrication. While the projected growth rate for the occupation is very high, the actual number of openings expected over the period is modest. The increasing use of computer-aided design (CAD) technology may dampen the strong employment growth projected here by allowing individual technologists to undertake larger volumes of work.

This occupation is not particularly sensitive to seasonal factors but is somewhat sensitive to fluctuations in the level of economic activity. The low level of U.I. beneficiaries in the occupation suggests that there are very few experienced architectural technologists or technicians presently unemployed in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	N/A
Highest 10% of Workers	N/A

Source: 1986 Census

Engineering Technologists and Technicians

2165

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	625	0.1	3.1	153
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	315	23
Grand Falls	50	1
Stephenville	35	1
Corner Brook	40	2
Labrador	35	1
Harbour Grace	30	1
Clarenville	15	0
Marystown	30	0
Gander	25	2

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	97	3	31	63	6	99	1
	1986	93	7	33	64	3	91	9
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (27)
- Electric Power (13)
- Air Transport (5)
- Telecommunications (4)

Manufacturing (22)
- Fish Products (9)
- Pulp and Paper (4)
- Electrical and Electronic Products (4)

Services (20)
- Business (8)
- Education (6)
- Recreation (4)

Engineering Technologists and Technicians

2165

Job Environment

Engineering technologists and technicians play a vital role in the design and operation of most aspects of production. They may specialize in any of the engineering disciplines including: civil engineering which is concerned with such areas as structural design, construction and maintenance, transport and water treatment; electrical and electronics engineering, which covers electrical machinery design, industrial control and computer hardware; industrial engineering, which is involved with quality control, energy systems, fire protection and computer applications; mechanical engineering, which deals with manufacturing, heating, ventilation, air conditioning; and refrigeration, and petroleum engineering, which is involved with oil and gas exploration, production, processing and refining. Technologists perform a variety of functions including measurement and analysis, design, supervision of field installation and quality control. Technicians do similar work, but usually at a less complex level and with less responsibility.

Training and Qualifications

To enter these occupations, one should complete a program of study in the particular area of interest at a community college or technology institute. These programs are usually three years in duration. Either the Cabot Institute, the Marine Institute or the Fisher Institute offer courses in the following: civil engineering technology; electrical/ electronics engineering technology; industrial engineering technology; mechanical engineering technology; petroleum engineering technology; safety engineering technology; and welding engineering technology. In some cases, the first year of these programs can be completed at various community colleges around the province.

Nature of Supply

Most engineering technicians and technologists in the province have either an institute of technology diploma or community college diploma. A small percentage have a university degree. Not surprisingly, the most common area of study is engineering and applied science technologies and trades. Although still male dominated, female representation in the occupation has been increasing. In 1986 women accounted for 7 percent of the occupation, up slightly from 1981. The large proportion of young people in the occupation combined with relatively few older workers suggests that many engineering technologists and technicians move on to other occupations relatively early in their careers. Having acquired several years of technical expertise, these individuals are well placed to move on to higher paying sales or management positions. Roughly half the people in this occupation reside in the St. John's Metro CEC area with the remainder spread fairly evenly around all regions of the province.

Job Prospects

Employment in this occupation actually declined slightly between 1981 and 1986. Large declines in the number of technologists employed in mining, telecommunications, business services and the federal government were offset to some extent by increased employment in fish products, electrical products, recreation and the provincial government. Employment growth for the decade as a whole is estimated to have been below average.

Employment growth in this occupational group is expected to be above average over the projection period based on the outlook for industries which employ engineering technicians. The occupation should benefit from increased activity in petroleum, shipbuilding, construction and business services resulting from the Hibernia construction project and related activity. Given the young average age of those in the occupation, relatively few replacement openings are expected.

This occupation is only mildly sensitive to seasonal factors but unemployment does increase slightly during the winter months when construction activity slows. Employment is somewhat sensitive to fluctuations in economic activity, particularly for those technicians and technologists employed in resource extraction, construction or manufacturing. Relative to employment, the number of U.I. beneficiaries in this occupation is low compared to most other occupations in the province. This suggests that there are relatively few experienced engineering technicians and technologists presently unemployed in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,020 or less
Average Worker	$ 29,770
Highest 10% of Workers	$ 43,641 or more

Source: 1986 Census

Mathematicians, Statisticians, and Actuaries 2181

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	73	-2.5	0.0	5
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	50	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	10	1
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	80	20	0	100	0	74	26
	1986	85	15	0	100	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (54)
- Provincial (46)
- Federal (8)

Manufacturing (15)
- Electrical & Electrical Products (15)

Transport, Communications and Utilities (15)
- Telecommunications (8)
- Electric Power (8)

Mathematicians, Statisticians, and Actuaries 2181

Job Environment

This occupational category includes actuaries, demographers, statisticians, sampling experts and survey statisticians.

Mathematicians work in either pure or applied fields: pure mathematicians are concerned with mathematics as an abstract science and usually teach in universities after obtaining a Ph.D; applied mathematicians work in industry and business in such areas as business management, laboratory research, product design or with computers. Statistics, a special branch of mathematics, involves the collection, arrangement, analysis, interpretation and presentation of numerical data.

Actuaries are mainly employed in the insurance industry. They design insurance and pension plans based on such statistical data as rates of sickness, injury, mortality, unemployment, accident, disability and retirement. They set premium rates and policy contract provisions for each type of insurance, according to social and demographic statistics.

Training and Qualifications

Mathematicians and statisticians have usually completed a bachelors degree in mathematics or statistics. Some positions may require a masters degree. While a university degree is not a requirement, most actuaries are university graduates. To become an actuary, one must have three years of relevant work experience and write a series of examinations administered by the Canadian Institute of Actuaries. Memorial University offers degree programs in mathematics and statistics. Bachelors and masters degree programs in actuarial science are available at other universities in Canada.

Nature of Supply

The vast majority of people employed in this occupational group have a university degree. Areas of specialization include mathematics, social sciences and business administration among others. The proportion of women in the occupation actually declined slightly between 1981 and 1986. The fact that there are no young people in this occupational area is in part of reflection of the length of time it takes to attain the educational requirements. The lack of older workers suggests that many people in this group move on to supervisory, administrative or managerial positions later in their careers. Most people in this occupation reside in the St. John's Metro CEC area with the remainder located in Labrador.

Job Prospects

Employment in these occupations declined slightly between 1981 and 1986 as both the federal and provincial governments employed fewer people in this group. The situation is thought to have improved in the latter half of the 1980s but employment was still below 1981 levels by the end of the decade.

Employment in this occupational area is expected to show very little change over the projection period. This view is consistent with the outlook for the sectors in which these occupations are employed, and in particular, the government sector. Some replacement openings are expected however, as some of those presently in the occupations move on to more senior positions.

Employment in these occupations tends to be year-round and is not affected by seasonal factors. Since most people in the group work for either the various levels of government or for public utilities, employment is not sensitive to fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries in the occupation. The occupations are sensitive to government spending decisions however and job opportunities may be scarce during periods of fiscal restraint.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 31,954
Highest 10% of Workers	N/A

Source: 1986 Census

Systems Analysts, Computer Programmers and Related Occupations 2183

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	573	8.2	3.1	128
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	400	28
Grand Falls	10	0
Stephenville	5	2
Corner Brook	35	3
Labrador	5	2
Harbour Grace	5	0
Clarenville	5	2
Marystown	0	0
Gander	15	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	75	25	36	64	0	98	2
	1986	62	38	48	52	0	93	7
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (42)
- Business (33)
- Education (6)
- Hospitals (2)

Transport, Communications & Utilities (26)
- Telecommunications (13)
- Electric Power (9)
- Radio & TV Broadcasting (2)

Public Administration (14)
- Federal (7)
- Provincial (6)

Systems Analysts, Computer Programmers and Related Occupations 2183

Job Environment

This occupational group includes systems analysts, software systems analysts, computer programmers and methods analysts. Typically, these people work in an office with extensive computerized operations and networks. Systems analysts design and implement computer systems, and computer programmers write and maintain computer programs. Senior analysts often assume leadership roles for systems projects. Careers in this field may lead to management positions.

Training and Qualifications

To enter these occupations, one should complete either a community college program or university degree program in computer science. Memorial University offers degree programs in computer science at the bachelors and masters levels. Three-year programs in computer science/computer studies are available at the Cabot Institute and the Western Community College. Two-year programs in business and computer studies are available at the Fisher Institute and the Central Community College. Private schools in the province also offer programs in this area ranging in duration from one to two years.

Nature of Supply

As would be expected, the vast majority of people in this group have some form of post-secondary education. The number of programmers/analysts with university degrees exceeds those with institute of technology or community college diplomas by a slight margin. Computer programming is the most common area of study followed by engineering and applied science technologies.

After rising dramatically in the 1970s, the percentage of women in this occupational group continued to increase between 1981 and 1986 to reach close to forty percent. The higher than average percentage of young people is a reflection of the continued rapid expansion in the occupation throughout the 1980s. The lack of older workers in the group is an indication that many programmers/analysts move on to management positions later in their careers. While most people in this occupation reside in the St. John's CEC area, positions are located in most areas of the province.

Job Prospects

The number of computer programmers and systems analysts employed in the province increased by over 60 percent between 1981 and 1986. This is a continuation of the strong growth that took place in the occupation during the 1970s. While some sectors such as business services, telecommunications and electric power experienced significant increases in the number of programmers/analysts they employ, the occupation also increased in a broad range of other industries. The average growth rate in the occupation for the decade as a whole is estimated to have been well in excess of the provincial labour market average.

Although employment growth is expected to slow compared to the 1980s, it should still exceed the average for all occupations to 1995. This is not surprising since the switch from larger computers to smaller ones has made the technology available to all types of organizations. This has also led to a change in the skill requirements for the occupation.

Programmers and analysts are not affected by seasonal factors and are only mildly sensitive to fluctuations in economic activity. While the number of U.I. beneficiaries in the occupation has increased in recent years, it is still very low given the size of the occupation in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 19,158 or less
Average Worker	$ 28,585
Highest 10% of Workers	$ 37,751 or more

Source: 1986 Census

Economists

2311

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	138	-1.8	0.3	12
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	100	14
Grand Falls	5	1
Stephenville	0	0
Corner Brook	15	2
Labrador	10	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	0	0
Gander	5	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	87	13	0	100	0	97	3
	1986	82	18	7	93	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (78)
- Federal (37)
- Provincial (33)
- Local (7)

Transport, Communications and Utilities (7)
- Trucking (4)
- Telecommunications (4)

Services (4)
- Business (4)

Economists

2311

Job Environment

Economists may specialize in any of a number of areas such as fisheries, fiscal policy, energy or labour. Some economists (for example, university professors) are primarily theoreticians interested in explaining economic trends. Most are concerned with the application of economic policy in a particular area such as health or education. Generally, activities include research, analysis, and the preparation of estimates, forecasts and reports. A business economist advises industrial firms and governmental agencies on issues related to operating efficiency, marketing methods and fiscal policy. Those who work for banks may analyze current business trends and develop market forecasts for money and credit. An investment economist may focus on predicting the effects of different social and political developments on industrial and securities markets.

Training and Qualifications

A University degree in economics is the minimum qualification for this occupation. However, job prospects are greatly improved with the completion of a masters degree. Memorial University offers a bachelors degree in economics. A masters degree in economics is not offered at M.U.N. but is available at Dalhousie University in Nova Scotia as well as many other universities across the country.

Nature of Supply

Virtually everyone employed in this occupation has some type of post-secondary education. Most have a university degree. Surprisingly, the most common area of study is commerce and business administration followed by the social sciences.

Women remain under-represented in this occupation although their share has been increasing in recent years. About one out of five economists in the province are women. The percentage of young people in this occupation is well below average. This is in part a reflection of the time it takes to attain the educational requirements. The fact that there are no older workers in the occupation indicates that many economists move on to management positions later in their careers. While most economists reside in the St. John's area, some positions are located in other areas of the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986 as fewer economists were employed by the various levels of government. Employment for the 1980s as a whole is estimated to have declined.

The occupation is expected to experience below average employment growth to 1995. The view is consistent with the outlook for the government sector, where most economists in the province are employed. The relatively low average age of the occupation will tend to limit replacement openings. The occupation is not affected by seasonal factors nor is it sensitive to fluctuations in economic conditions. Since most economists in the province are employed by government, the occupation is sensitive to government spending decisions. Job opportunities may be scarce during periods of fiscal restraint. Although the number of U.I. beneficiaries in this occupation has risen in recent years, it is still low compared to most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 25,337 or less
Average Worker	$ 34,175
Highest 10% of Workers	$ 48,787 or more

Source: 1986 Census

Psychologists 2315

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	273	14.5	1.6	53
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	115	1
Grand Falls	5	0
Stephenville	10	0
Corner Brook	20	0
Labrador	15	0
Harbour Grace	5	0
Clarenville	20	0
Marystown	0	0
Gander	15	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	58	42	0	100	0	90	10
	1986	42	58	12	84	3	78	22
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (86)
- Education (54)
- Health & Welfare, Non-Hospital (21)
- Hospitals (9)

Public Administration (14)
- Provincial (14)

Psychologists

2315

Job Environment

This group includes child psychologists, educational psychologists, industrial psychologists, mental health counsellors, neuropsychologists, rehabilitation psychologists and research psychologists.

These professionals study individual and group behaviour of humans as well as animals. Areas of study include the mental processes of thinking, learning and remembering, decision-making, drives and personality. Tests, questionnaires and controlled experiments are used to obtain data, test hypotheses and develop theories. Research psychologists carry out experiments on both humans and animals.

In colleges and universities, psychologists combine teaching with research and administrative duties. In applied fields, they assess psychological disorders, conduct training programs, counsel, develop intervention programs, evaluate effectiveness of various programs, provide clinical psychological or therapeutic services, and sometimes act as consultants for industry and government.

Training and Qualifications

At present, to be eligible for licensing as a psychologist in Newfoundland, one must have completed a masters degree in psychology and have two years of relevant work experience. However, in the coming years, a doctoral degree in psychology will be necessary to practice psychology in the province. Memorial University offers degree programs in psychology at the bachelors, masters, and doctoral levels. A masters degree in educational psychology is also available at M.U.N.

Nature of Supply

An overwhelming majority of psychologists in the province have a university degree. The most common areas of study are educational and counselling services and the social sciences. Women account for a majority of employment in this occupational area. Their share increased from 42 percent in 1981 to 58 percent in 1986. The percentage of young people in the occupation is well below average. This is a reflection of the time it takes to acquire the necessary educational qualifications. The percentage of older workers in the occupation is also below average. About half the psychologists in the province are located in the St. John's area.

Job Prospects

The number of psychologists employed in the province more than doubled between 1981 and 1986. Large increases occurred in education, non-hospital health services, and in the provincial government. The number of psychologists employed in hospitals actually declined slightly. Employment growth for the decade as a whole is estimated to have been well in excess of the provincial labour market average.

Employment growth between 1990 and 1995 is expected to be about average. This view is based on the outlook for the sectors which employ the occupation. Actual job openings may exceed the number projected here. A number of positions are presently vacant due to a lack of qualified personnel in the province. The available supply will become even more restricted when the Ph.D. requirement comes into effect. Hence, the labour market will remain extremely attractive for those with the proper educational qualifications.

This occupation is non seasonal and is not affected by fluctuations in economic activity. However, since many psychologists are employed by government funded institutions and agencies, employment growth could be curtailed during periods of fiscal restraint. The low number of U.I. beneficiaries in this occupation is a reflection of the extremely attractive labour market facing qualified psychologists in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 35,902
Highest 10% of Workers	N/A

Source: 1986 Census

Social Workers 2331

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	746	7.3	1.7	150
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	340	12
Grand Falls	35	0
Stephenville	55	3
Corner Brook	75	3
Labrador	25	0
Harbour Grace	30	2
Clarenville	25	1
Marystown	20	1
Gander	60	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	48	52	24	76	0	94	6
	1986	35	65	24	74	2	88	12
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (66)
- Provincial (62)
- Federal (4)

Services (34)
- Health & Welfare, Non-Hospital (17)
- Hospitals (11)
- Miscellaneous (4)

Social Workers 2331

Job Environment

Social work professionals are employed in a range of community settings, including health centres, hospitals, group homes, correctional institutions, school boards and social service agencies. Their clients include troubled youth, the poor, the unemployed, victims of crime, prisoners, the sick, disabled people, and families. Social workers interview clients individually or in groups to assess the nature and severity of their problems and to determine the type of services required. Besides counselling, the professional social worker may advocate on behalf of the client for needed services, particularly in communities where the health and social services have limited mandates. In some cases, social workers may initiate legal action, such as petitioning to obtain crown wardship on behalf of a child. Social workers are often members of teams of related professionals working with a particular client program.

Social workers have formal training in counselling and social policies and share a commitment to a professional code of ethics. Their approach to social reform and intervention is based on a belief that the social conditions of humanity can be bettered.

Training and Qualifications

This occupation requires a university degree in social work. For some positions, particularly at the administrative level, a masters degree may be necessary. Memorial University offers degree programs in social work at the bachelors and masters levels.

Nature of Supply

Most social workers in the province have completed a university degree. The most common area of study is the social sciences. The proportion of women in this occupation continued to rise between 1981 and 1986 to reach 65 percent. The small percentage of older workers in the occupation suggests that many social workers either retire early or move on to other occupations later in their careers. About half the social workers in the province are located in the St. John's area but the occupation is represented in all parts of the province.

Job Prospects

Employment in the occupation increased by almost 80 percent between 1981 and 1986 due primarily to a large increase in the number of social workers employed by the provincial government. Employment growth for the decade as a whole is estimated to have been well above the average for all occupations.

Employment growth between 1990 and 1991 is expected to be about average. This view is consistent with the outlook for the sectors in which social workers are employed, and in particular the government sector. Of the 150 openings expected over this period, roughly two out of five will be new positions. The remainder will be replacement openings that become available when those currently in the positions retire or move on to other occupations.

The occupation is not sensitive to seasonal factors nor is it affected by fluctuations in economic activity. However, since most social workers work for government or government funded institutions or agencies, the occupation is influenced by government spending decisions. Employment growth could be curtailed during periods of fiscal restraint. The relatively low number of U.I. beneficiaries in this occupation has shown very little change in recent years. This is a reflection of the relatively attractive labour market for social workers in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 17,564 or less
Average Worker	$ 24,661
Highest 10% of Workers	$ 31,377 or more

Source: 1986 Census

Occupations in Welfare and Community Services 2333

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	840	6.9	1.3	163
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	265	35
Grand Falls	40	26
Stephenville	80	46
Corner Brook	130	21
Labrador	75	3
Harbour Grace	35	9
Clarenville	25	2
Marystown	15	28
Gander	30	125

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	54	46	44	48	8	87	13
	1986	28	72	36	59	5	85	15
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (56)
- Health & Welfare, Non-Hospital (30)
- Miscellaneous (14)
- Education (4)

Public Administration (42)
- Provincial (30)
- Local (10)
- Federal (3)

Occupations in Welfare and Community Services 2333

Job Environment

This is a very broad occupational group. Its numbers include people concerned with providing social services to individuals, families and groups, and with providing assistance to professional social workers; organizing and supervising social, recreational and cultural activities in youth or family camps, community centres, playgrounds and other settings; and caring for residents of halfway houses, group homes and residential treatment facilities. Some typical job titles are child-care worker, visiting homemaker, camp director or counsellor, and mental-retardation worker.

Child-care workers counsel emotionally disturbed or mentally disabled children or youths. Visiting homemakers care for householders and their dependants during periods of incapacitation, convalescence or family disruption. Camp directors direct and coordinate the activities of children's, youth or family camps with the support of camp counsellors and other staff. Mental-retardation workers instruct, counsel and care for mentally retarded children and adults in residential institutions and sheltered workshops.

Training and Qualifications

These occupations usually require high school graduation and the completion of a community college program in the specific field of interest. Some positions may require a university degree or course work in psychology or social work. The Cabot Institute offers a two-year program in community recreation leadership. The Western Community College offers a two-year program in community studies with options in community development and development disabilities.

Nature of Supply

Many people in these occupations have no post-secondary education. Those that do have a broad range of subject areas including counselling services and social sciences. The proportion of women in this group increased significantly between 1981 and 1986 to reach 72 percent. While the percentage of young people in the group declined slightly over this period, it remained roughly in line with the provincial labour market average. The proportion of older workers is slightly below the all-occupation average. These occupations are dispersed throughout the province.

Job Prospects

Employment in these occupations increased by almost 40 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been well above average. Growth is expected to slow considerably in the 1990s but will still be positive.

These occupations are projected to increase at a slightly lower than average rate between 1990 and 1995. This view is consistent with the outlook for health and welfare services and public administration where most people in these occupations are employed. This group is not affected by seasonal factors nor is it particularly sensitive to fluctuations in economic activity. However, since most people in these occupations are employed by government or government funded agencies or institutions, they are affected by government spending decisions. Job opportunities may be curtailed during periods of fiscal restraint. The number of U.I. beneficiaries in these occupations has increased significantly in recent years. This suggests that there may be a significant number of people with previous work experience in this area presently unemployed in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 10,050 or less
Average Worker	$ 17,952
Highest 10% of Workers	$ 25,576 or more

Source: 1986 Census

Lawyers and Notaries 2343

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	447	3.9	3.5	123
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	290	1
Grand Falls	10	0
Stephenville	15	0
Corner Brook	20	0
Labrador	0	0
Harbour Grace	15	0
Clarenville	5	0
Marystown	0	0
Gander	10	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	89	11	0	87	13	100	0
	1986	86	14	4	92	4	97	3
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (80)
- Business (80)

Public Administration (17)
- Provincial (14)
- Federal (3)

Lawyers and Notaries

2343

Job Environment

Lawyers interpret laws and offer counsel and advice to business and to individuals. For lawyers who specialize in corporate law (such as stock exchange regulations and corporate income tax laws) and commercial law (import-export regulations, currency controls or bankruptcy regulations), a background in commerce, finance or accounting is a definite asset. Labour lawyers advise on policy matters and wage trends and represent their clients in negotiations and at tribunals. Criminal lawyers defend people who have been charged with crimes. Other areas of specialization include industrial property law, family law, estate law, municipal law and litigation.

Training and Qualifications

The educational requirements for this occupation call for the completion of a university undergraduate degree which usually takes four years. One can then apply for admission to law school which takes an additional three years. After completing the educational requirements, a law graduate must work under the supervision of a practising lawyer. This form of on-the-job training, called "articling", takes one year. The prospective lawyer is then eligible to write the bar examination and if successful is admitted to the bar.

Nature of Supply

While the number of female lawyers in the province has been increasing, the occupation continues to be dominated by men. In 1986, women accounted for less than 15 percent of the profession compared to 11 percent in 1981. The small proportion of young people in the occupation is a reflection of the lengthy period it takes to acquire the necessary educational qualifications. The significant drop in the percentage of older workers in the occupation between 1981 and 1986 suggests that many older lawyers retired over this period. About 80 percent of all lawyers in the province reside in the St. John's area.

Job Prospects

Employment in this occupation increased by 30 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been above average. The profession should continue to experience above average growth into the 1990s. New positions are expected to exceed replacement openings by a two to one margin.

Most lawyers in the province work either for themselves or for other lawyers. A small percentage are also employed by government. The occupation offers stable year-round employment and since most lawyers are self-employed, employment is not affected by fluctuations in economic activity. However, during a period of economic contraction some lawyers may experience a decline in income.

1985 Annual Earnings

Lowest 10% of Workers	$ 5,836 or less
Average Worker	$ 33,694
Highest 10% of Workers	$ 70,262 or more

Source: 1986 Census

Librarians, Archivists, and Conservators 2351

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	270	2.6	0.2	137
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	155	2
Grand Falls	15	1
Stephenville	20	1
Corner Brook	10	1
Labrador	10	1
Harbour Grace	10	0
Clarenville	5	0
Marystown	15	0
Gander	5	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	10	90	0	73	27	72	28
	1986	18	82	5	78	17	67	33
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (90)
- Education (84)
- Miscellaneous (4)
- Hospitals (2)

Public Administration (4)
- Provincial (4)

Finance, Insurance and Real Estate (4)

Librarians, Archivists, and Conservators

2351

Job Environment

Three distinct professions exist within this occupational group. Contemporary librarians, aided by the latest computer technology, provide both technical services, acquiring and organizing library collections, and public services, assisting users in finding information. They work in a range of positions for tax-supported institutions at the federal, provincial and municipal levels of government and in private sector libraries.

Archivists are responsible for the selection, evaluation and acquisition of documents for such institutions such as universities and museums and for different levels of government. They develop contacts and pursue leads to obtain materials such as historical photographs, maps, films, tapes, private manuscripts and outdated public, municipal and corporate records. Archivists also authenticate records, and index and classify all sources to be preserved. They provide research and reference services to the public.

Conservators preserve and restore historic objects and works of art in the collections of archives, museums, universities and government departments. These collections may include paintings, photographs, pottery, antique furniture, documents, works of art on paper or in metal or stone, and other artifacts. In their work, conservators use various scientific techniques, such as ultraviolet photography, and radiographic and microscopic examination. Conservators also conduct research, prepare reports and advise on the condition of artifacts and works of art.

Training and Qualifications

The educational requirements for these positions usually call for the completion of a university degree. A masters degree in library science would enhance employability and prospects for future advancements. Memorial University does not offer a masters degree program in library science. However, this program is offered at several universities throughout Canada including Dalhousie University in Nova Scotia. Conservators should have a masters degree in art conservation.

Nature of Supply

Most people in these occupations have some form of post-secondary education, usually a university degree. Their subject areas include education, the humanities and the social sciences. While the proportion of men in this field increased between 1981 and 1986, the occupation continues to be dominated by women. They account for over 80 percent of employment in this group. The small number of young people in this group is a reflection of the lengthy time period required to attain the necessary educational qualifications. The higher than average number of older workers in the occupation suggests a significant number of replacement openings can be expected in coming years as some of these older workers retire.

Job Prospects

Employment in these occupations showed very little change between 1981 and 1986. The situation is thought to have improved in the latter part of the decade so that for the 1980s as a whole employment growth is estimated to have been above average. This strong performance will probably not carry over into the 1990s.

Employment growth in this occupational area is projected to be below average over the forecast period. This view is consistent with the outlook for sectors that employ librarians, particularly the education sector. Given the relatively high number of older workers in the occupation, a significant number of replacement openings are expected by 1995.

Librarians, archivists and conservators enjoy stable year-round employment and are not affected by fluctuations in economic activity. Since most are employed in the education sector which is funded by government, they are affected by government spending decisions. Job opportunities may be scarce during periods of fiscal restraint. Some positions may also be lost due to declining school enrolments in some areas of the province. The low number of U.I. beneficiaries in this occupational area compares favourably with most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 7,303 or less
Average Worker	$ 23,402
Highest 10% of Workers	$ 42,023 or more

Source: 1986 Census

Educational and Vocational Counsellors 2391

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	103	3.9	0.4	12
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	50	15
Grand Falls	0	1
Stephenville	0	3
Corner Brook	10	4
Labrador	5	3
Harbour Grace	5	2
Clarenville	0	1
Marystown	10	0
Gander	15	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	83	17	0	100	0	94	6
	1986	60	40	15	85	0	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (89)
- Education (83)
- Health & Welfare, Non-Hospital (6)

Public Administration (11)
- Provincial (11)

Educational and Vocational Counsellors

2391

Job Environment

This category includes educational advisors, guidance counsellors, employment counsellors and vocational counsellors. Counsellors can be found in schools, businesses, industry, government, community agencies and consulting. Their responsibilities include helping people to make career decisions at various stages in life and to develop the life skills necessary for adapting to a rapidly changing society.

Career counsellors assess clients' needs and assist them in seeking and preparing for jobs. Other counsellors may limit themselves to helping those with special needs, such as retired people, disabled people, women, ethnic minorities, immigrants, prison inmates, apprentices and the unemployed.

Training and Qualifications

The usual educational requirements for these occupations call for the completion of a university degree in education supplemented by a masters degree in a related field such as counselling. Memorial University offers degree programs in education at the bachelors and masters levels including a masters program in guidance and counselling.

Nature of Supply

Most people in this occupation have a university degree in educational and counselling services. The proportion of women in the occupation increased significantly between 1981 and 1986. They now account for forty percent of employment in this occupational area. The percentage of young people is below average, reflecting the time it takes to acquire the necessary educational qualifications. The fact that there are no older workers in the occupation suggests that many of these counsellors retire or move on to administrative positions later in their careers. About half the educational and vocational counsellors in the province are located in the St. John's area.

Job Prospects

Employment in this occupation increased slightly between 1981 and 1986. However, employment prospects are thought to have improved in the latter part of the 1980s and for the decade as a whole employment growth is estimated to have been well above average.

Between 1990 and 1995, employment growth in this occupational area is expected to be below average. This view is consistent with the outlook for the education sector where the vast majority of educational and vocational counsellors are employed. While the number of new positions will be limited over this period, a significant number of replacement openings should arise as those presently in the positions retire or move on to other occupations.

Those counsellors who work in the education system enjoy the same extended vacation periods as do teachers. Like teachers, their jobs are not sensitive to fluctuations in economic activity, but because they are indirectly employed by government, they are affected by government spending decisions. Job opportunities may be curtailed during periods of fiscal restraint. Some positions could also be affected by declining enrolments in some areas of the province. The number of U.I. beneficiaries in this occupational area has increased in recent years.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 38,978
Highest 10% of Workers	N/A

Source: 1986 Census

University Teachers 2711

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	739	4.9	-0.2	89
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	605	4
Grand Falls	10	0
Stephenville	0	0
Corner Brook	45	1
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	5	0
Gander	0	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	77	23	0	90	10	89	11
	1986	67	33	1	85	14	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Education (100)

University Teachers

2711

Job Environment

This occupational group includes all teaching positions at the university level: assistant and associate professor, lecturer, instructor and fellow. The work of full-time university teachers is diverse, extensive and demanding. Professors must prepare teaching material, give lectures, produce timely publications in their areas of research, mark student assignments and serve on faculty committees dealing with such matters as curriculum development and degree requirements.

Training and Qualifications

The minimum qualifications for this occupation are the completion of university undergraduate and masters degrees. More senior positions such as professor and dean normally require a degree at the doctoral level. Doctoral degrees in some disciplines are available at Memorial University.

Nature of Supply

People in this occupation have a university background. They have a wide diversity of subject areas but the most common are the humanities, mathematics and the physical sciences, education and counselling services, and the social sciences.

Although still a minority, women have increased their representation in this occupation between 1981 and 1986. By that point in time one out of three university professors in the province were women. The extremely low percentage of young people in this occupational area is indicative of the time required to attain the necessary educational requirements. The higher than average percentage of older workers in the occupation suggests a significant number of university professors will be approaching retirement age during the 1990s. Not surprisingly, the vast majority of professors are located in the St. John's region.

Job Prospects

Employment in this occupation increased by over 15 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been well above average. Current projections call for below average growth in this occupational area to 1995. This view is based on the outlook for the education sector which is expected to experience slower growth than was the case in the previous decade. However, given the relatively high number of older workers in the occupation, a significant number of replacement openings are expected by 1995.

This occupation offers stable year-round employment and is not affected by fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries in this occupational area. However, since the province's university is partly funded by government, the occupation is sensitive to government spending decisions. Job opportunities may be curtailed during periods of fiscal restraint.

1985 Annual Earnings

Lowest 10% of Workers	$ 27,851 or less
Average Worker	$ 40,190
Highest 10% of Workers	$ 53,264 or more

Source: 1986 Census

Elementary and Kindergarten Teachers 2731

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	5,156	3.5	-0.2	760
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	1,470	236
Grand Falls	560	56
Stephenville	390	32
Corner Brook	595	73
Labrador	305	18
Harbour Grace	350	23
Clarenville	235	9
Marystown	240	24
Gander	420	54

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	24	76	8	89	3	89	11
	1986	27	73	5	91	4	84	16
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (98)
- Education (95)
- Health & Welfare, Non-Hospital (3)

Public Administration (2)
- Provincial (2)

Elementary and Kindergarten Teachers 2731

Job Environment

In addition to kindergarten and elementary teachers, this group also includes pre-school teachers and day care workers.

Elementary and Kindergarten teachers are primarily generalists who teach children 5-12 years of age. They may teach all subjects in one classroom, although in many schools there are specialists who focus on physical education, art, music and library. This group can experience long hours of preparation as well as be expected to participate in extra-curricular school activities. Teachers are also responsible for monitoring their pupils' progress and discussing their students' needs with parents and other educational professionals. Day care workers organize and supervise the activities of pre-school children. These activities are structured to develop attention skills in children and help them to develop their personal and social habits.

Training and Qualifications

Kindergarten and elementary teachers must complete a university degree program in education. A masters degree in educational administration would be advantageous for those wishing to move into administrative positions. Memorial University offers degree programs in education with various specializations at the bachelors and masters levels. The qualifications for pre-school teacher and day care worker vary, but prospects are greatly enhanced by the completion of a community college program in the field. The Cabot Institute and the Fisher Institute offer two-year programs in early childhood education. Some private schools in the province offer similar programs of one-year duration.

Nature of Supply

Most people in this occupation have a university background in education although some have specialized in other subject areas. The occupation continues to be dominated by women. They account for about three out of four elementary and kindergarten teachers in the province. The low percentage of young people in the occupation is not surprising given the educational requirements for the position. The relatively low number of older workers in the occupation suggests that many of these teachers retire early or move on to other occupations later in their careers. Part-time employment is fairly common in this occupational area.

Job Prospects

The number of elementary and kindergarten teachers employed in the province increased slightly between 1981 and 1986. Employment prospects are thought to have improved in the latter part of the decade and growth for the 1980s as a whole is estimated to have been above average. Growth prospects are expected to slow in the 1990s however and will be below average over the projection period. This is not surprising given the outlook for the education sector. School enrolments are expected to continue to decline in coming years. This factor, combined with government spending restraint will limit the number of new positions in the occupation. A significant number of replacement openings are expected by 1995 however.

The teaching profession offers stable year-round employment with ample vacation time especially during the summer months. While teachers are not affected by changing economic conditions, the occupation is sensitive to government spending decisions. An increase in the number of U.I. beneficiaries in this occupational area in recent years suggests that there are a significant number of experienced teachers presently unemployed in the province. However, the teaching profession still compares favourably with many other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 22,329 or less
Average Worker	$ 28,710
Highest 10% of Workers	$ 35,477 or more

Source: 1986 Census

Secondary School Teacher 2733

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	3,931	5.0	0.5	483
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	1,130	12
Grand Falls	430	1
Stephenville	295	0
Corner Brook	405	7
Labrador	245	2
Harbour Grace	265	0
Clarenville	165	0
Marystown	185	6
Gander	310	3

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	66	34	8	89	3	91	9
	1986	64	367	4	95	1	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (98)	Public Administration (2)
- Education (98)	- Provincial (2)

Secondary School Teacher

2733

Job Environment

This occupational group consists of junior and senior high school teachers (Grades 7 to 12). Most are trained as specialists in subjects as varied as mathematics, sciences, languages and industrial arts, but they may sometimes be required to teach courses outside their chosen area.

In addition to their classroom duties, secondary school teachers must spend time researching their subjects, preparing background materials for lessons and deciding how to stimulate student interest. They frequently supervise extra-curricular activities and occasionally work additional hours in the evenings or on weekends to prepare student evaluations and meet with parents. A major attraction of this occupation is that teachers are entitled to a great deal of time off including school holidays and long summer vacations.

Training and Qualifications

To become a school teacher, one should complete a university degree program in education. Memorial University offers degree programs in education with various specializations at the bachelors and masters levels.

Nature of Supply

Most people in the occupation have a university degree in education although a number have specialized in other subject areas such as the humanities, mathematics and the physical sciences, or the social sciences. Unlike elementary teachers, secondary teachers are predominately male. Women account for just over one-third of secondary teachers in the province. The very low percentage of young people in the occupation is a reflection of the education requirements. The lack of older workers suggests that many secondary teachers retire early or move on to administrative positions later in their careers. This occupation is well represented in all areas of the province.

Job Prospects

Employment in this occupation rose by over 15 percent between 1981 and 1986, a much higher increase than was recorded for elementary teachers over the same period. Growth for the 1980s as a whole is estimated to have been considerably above average. Much slower growth is projected in the 1990s as declining enrolments and government spending restraint will tend to limit the number of new job openings. A significant number of replacement openings are expected by 1995 however.

The teaching profession offers stable year-round employment with ample vacation time especially during the summer months. While the occupation is not affected by fluctuations in economic conditions, it is sensitive to government spending decisions. Job opportunities may be curtailed during periods of economic restraint. Given the size of this occupation, the number of U.I. beneficiaries is extremely low. This suggests only a limited number of experienced secondary teachers are presently unemployed.

1985 Annual Earnings

Lowest 10% of Workers	$ 24,694 or less
Average Worker	$ 31,561
Highest 10% of Workers	$ 39,098 or more

Source: 1986 Census

Community College and Vocational Teachers 2791

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	677	0.2	-0.1	105
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	275	14
Grand Falls	60	6
Stephenville	85	1
Corner Brook	85	4
Labrador	15	1
Harbour Grace	35	8
Clarenville	25	3
Marystown	25	4
Gander	5	8

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	66	34	3	87	10	93	7
	1986	69	31	4	90	6	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (93)	Public Administration (7)
- Education (93)	- Provincial (7)

Community College and Vocational Teachers 2791

Job Environment

Community college and vocational instructors teach courses in a broad range of fields at post-secondary and trade/vocational institutions. They cover such areas as medical and dental technology, bookkeeping, community and social services, behavioral science, electronics, engineering trades, arts, aircraft and heavy duty mechanics, and construction trades. Although the duties of college and vocational instructors vary with the teaching mandate, the size of the school, the subject area and the level of instruction, there are some similarities in general duties and responsibilities. Most instructors spend their day teaching classes in lectures, demonstrations or lab work. Instructors in some programs employ a hands-on approach, supervising their students in independent or group projects. Other duties resemble those assumed by teachers at other levels, such as preparing lessons and marking assignments and exams. After acquiring experience, instructors may advance to positions such as department or program head, which involve supervisory and administrative duties.

Training and Qualifications

The qualifications for these occupations vary but high school graduation and several years of training and experience in the field being taught are usually required. Employment prospects would be greatly enhanced by the completion of the degree or diploma program in vocational education offered at Memorial University.

Nature of Supply

Most people in this occupation have some type of post-secondary education, be it a university degree or a community college or institute of technology diploma. The most common subject areas after education are engineering and applied sciences technologies and trades or business administration.

According to the 1986 Census, men accounted for about 70 percent of employment in this occupation compared to 66 percent in 1981. The low percentage of young people in the occupation is a reflection of the time it takes to acquire the necessary educational qualifications and practical experience. The number of older workers in the occupation is roughly in line with the provincial labour market average. This occupation is represented in all areas of the province.

Job Prospects

Employment in this occupation declined by over 20 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been well below average. Employment in this occupational area may decline slightly over the next few years but a significant number of replacement openings are expected by 1995 given the number of older workers in the occupation.

Community college and vocational school teachers enjoy stable year-round employment and are not affected by fluctuations in economic activity. However, since community colleges are in part funded by government, the occupation is sensitive to government spending decisions. Job opportunities could be curtailed during periods of fiscal restraint. While the number of U.I. beneficiaries has risen in recent years, the occupation still compares favourably with most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 24,107 or less
Average Worker	$ 32,378
Highest 10% of Workers	$ 42,002 or more

Source: 1986 Census

Teachers of Exceptional Students 2795

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	956	10.4	1.4	208
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	320	1
Grand Falls	125	0
Stephenville	45	0
Corner Brook	65	0
Labrador	60	0
Harbour Grace	40	0
Clarenville	35	0
Marystown	50	1
Gander	70	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	42	58	17	83	0	92	8
	1986	24	76	15	79	6	92	8
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (88)
- Education (79)
- Health & Welfare, Non-Hospital (6)
- Hospitals (1)

Public Administration (12)
- Provincial (11)
- Federal (1)

Teachers of Exceptional Students

2795

Job Environment

This category of teachers works with blind, hearing-impaired, mentally and physically disabled, and gifted students. They evaluate the needs and abilities of their students and provide them with a special education curriculum which stresses basic academic criteria and which is adapted to the students' needs.

The average class size is much smaller than that of standard classes, but increasingly these students are being integrated into regular schools and classes, where special educators act in advisory roles.

Training and Qualifications

The minimum requirement to enter this occupation is the completion of a university degree program in education. Memorial University offers a bachelors degree program in special education.

Nature of Supply

Most teachers of exceptional students in the province have a university degree in education although other subject areas are also represented. The percentage of women in the occupation increased in the early 1980s to equal 76 percent by 1986. While the number of young people in the occupation is relatively low compared to the overall average, it is rather high compared to the other teaching occupations. This is due to the emergence of this particular occupation in recent years. The number of older workers in the occupation is roughly in line with the provincial labour market average. As with the other teaching occupations, these teachers are located in all parts of the province.

Job Prospects

Employment in this occupation increased by over 70 percent between 1981 and 1986, a considerably faster rate of increase than was recorded for other teachers or for the labour force as a whole. Employment growth during the 1980s is estimated to have been well above average. While the number of teachers of exceptional students is projected to increase much more slowly in the 1990s, the occupation should still expand at a faster rate than the other teaching occupations. A significant number of replacement openings are also expected by 1995.

This occupation offers stable year-round employment and is not affected by fluctuations in economic conditions. However, since the occupation is employed either directly by government or by an institution or agency funded by government, it is sensitive to government spending decisions. Job opportunities may be curtailed during periods of fiscal restraint. The rather attractive labour market facing teachers of exceptional students is reflected in the extremely low number of U.I. beneficiaries in the occupation.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,054 or less
Average Worker	$ 28,196
Highest 10% of Workers	$ 38,252 or more

Source: 1986 Census

Physicians and Surgeons

3111

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	885	1.9	2.3	193
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	415	1
Grand Falls	50	0
Stephenville	30	0
Corner Brook	70	0
Labrador	20	1
Harbour Grace	35	0
Clarenville	15	0
Marystown	10	0
Gander	55	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	85	15	3	80	17	97	3
	1986	88	12	2	78	20	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (97)
- Health & Welfare, Non-Hospitals (52)
- Hospitals (40)
- Education (6)

Public Administration (1)
- Provincial (1)

Physicians and Surgeons

3111

Job Environment

Physicians and surgeons are concerned with the prevention and treatment of human illness and injury. Physicians examine patients, determine their medical histories and establish a diagnosis. They prescribe and administer drugs or medical or surgical treatment, and certify births, deaths and outbreaks of reportable contagious diseases. General practitioners undertake the primary care of patients who suffer from a wide variety of illnesses or injuries. If necessary, they refer their patients to specialists for diagnosis and treatment, and assume responsibility for continuity of care. Physicians who choose to specialize limit their practice to specialized fields within clinical medicine, surgery or laboratory medicine. Obstetrics and gynaecology, plastic surgery and neurosurgery are examples of specializations in surgery. Specializations in clinical medicine include dermatology, paediatrics, psychiatry, and radiology. Laboratory medicine specializations include haematological pathology and medical microbiology.

Practising physicians work long hours, often under stress, but they also enjoy autonomy, considerable job satisfaction, high income and employment security.

Training and Qualifications

To become a physician, one should undertake a minimum of two years university in a pre-medicine program. This would be followed by a four-year degree in medicine. A one-year internship in an affiliated hospital is subsequently required to become eligible for licensure. Candidates seeking certification in family practice must complete a two-year residency program and pass an examination set by the College of Family Physicians of Canada. To become a specialist medical graduates must complete a minimum of three years hospital-based residency and pass an examination set by the Royal College of Physicians and Surgeons of Canada.

Nature of Supply

This profession continues to be male-dominated despite an increase in the number of female medical school graduates in recent years. Approximately 12 percent of doctors in the province were female in 1986. The very low percentage of young people in the occupation is a reflection of the extensive educational qualifications and practical experience required to become a medical doctor. Unlike some other occupations which change as a person's career progresses, doctors tend to remain in their chosen profession most, if not all of their working lives. This accounts for the large percentage of older workers in the occupation. While a majority of doctors reside in the St. John's area, the occupation is represented in all parts of the province.

Job Prospects

The number of doctors employed in the province increased at about the average rate of all occupations during the 1980s. This situation should be maintained into the 1990s with the profession expected to grow at a rate similar to the all occupation average. This rate of growth should be somewhat faster than was the case in the previous decade. The large number of doctors in the province approaching retirement age should result in a considerable number of replacement openings by 1995.

Newfoundland has traditionally had a difficult time ensuring an adequate supply of medical personnel in all areas of the province. While this situation has improved in recent years, opportunities will continue to exist in some rural areas of the province. Certain medical specialties are also in short supply.

This occupation offers stable year-round employment and is not affected by fluctuations in business conditions. Since the vast majority of doctors are self-employed, unemployment in the profession is very rare.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 66,191
Highest 10% of Workers	N/A

Source: 1986 Census

Dentists 3113

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	128	.4	2.2	26
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	55	0
Grand Falls	5	0
Stephenville	0	0
Corner Brook	20	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	5	0
Marystown	0	0
Gander	15	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	86	14	0	100	0	100	0
	1986	80	20	0	96	4	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Health & Welfare, Non-Hospitals (95)

Dentists

3113

Job Environment

Dentists are as concerned with patient education and the prevention of oral disease as they are with the examination, diagnosis and treatment of diseases, injuries and malformations of the teeth and mouth. Although most dentists are general practitioners there are a number of dental specialties including orthodontics, periodontics and oral surgery. The majority of dentists work in private practice and may employ auxiliary dental personnel such as dental hygienists, nurses, assistants and technicians.

Training and Qualifications

To become a dentist, one must complete a pre-dental program of studies at university and pass an aptitude test given by the Canadian Dental Association. This is followed by a four-year university degree program in dentistry leading to either Doctor of Dental Surgery or Doctor of Dental Medicine. One to three years of additional study may be required for specialization. A dental program is not available at M.U.N. but is available at Dalhousie University in Nova Scotia.

Nature of Supply

While the number of female dentists has been increasing, the profession continues to be dominated by men. One out of five dentists in the province was female at the time of the 1986 Census. The lack of young people in the occupation is not surprising given the extensive training required to become a dentist. The proportion of older dentists in the province increased between 1981 and 1986 but was still below the labour force average. About half of Newfoundland's dentists reside in the St. John's area.

Job Prospects

The number of dentists employed in the province increased significantly in the early 1980s but has declined slightly since then. Growth for the decade as a whole, while positive, was below average. The occupation is expected to increase at the average rate for all occupations to 1995. However, this depends to a large extent on the number of Newfoundlanders accepted at schools of dentistry, which are located outside the province.

Since the vast majority of dentists in the province are self-employed, unemployment in the profession is extremely rare. The occupation offers stable year round employment and is not affected by fluctuations in economic activity.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 68,175
Highest 10% of Workers	N/A

Source: 1986 Census

Veterinarians 3115

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	38	7.4	4.3	11
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	20	0
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	15	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	100	0
	1986	67	33	0	100	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Agriculture (71)

Public Administration (29)
- Provincial (29)

Veterinarians 3115

Job Environment

Veterinarians are responsible for the prevention, diagnosis and treatment of disease and injury in animals. They also advise clients on animal feeding, hygiene, breeding and care. Most veterinarians are employed in private practice, although group practices, such as animal hospitals and clinics, are becoming increasingly common in response to escalating start-up and operating costs. Veterinarians in urban areas usually treat house pets, mainly dogs and cats, whereas those in agricultural and rural communities deal primarily with farm animals. Rural practices have become more sophisticated in the last few decades because of the changing needs of large farm operations. Although rural veterinarians may still respond to emergency calls, animals are more often brought in for scheduled surgical procedures at well-equipped and staffed animal clinics. Some veterinarians specialize in the care of a particular species, work in zoos, on wildlife preserves and in education, research or government. The federal government employs veterinarians in such varied activities as disease control, research, laboratory testing, and animal and meat inspection.

Training and Qualifications

To become licensed as a veterinarian, one must complete a Doctor of Veterinary Medicine degree and write the National Examining Board examination. To be accepted into the four-year degree program offered at the Atlantic Veterinary College in Prince Edward Island, one must complete a minimum of two years of university with concentration in the sciences. However, because of stiff competition, an undergraduate degree is preferred.

Nature of Supply

Women accounted for one-third of the veterinarians employed in the province according to the 1986 Census. This is a considerable increase over 1981 when the occupation was completely male dominated. The lack of young people in the occupation is not surprising given the time required to acquire the necessary educational qualifications. The fact that there were no older workers in the occupation is surprising and may reflect a high turnover rate for the profession in this province. This in turn may be related to the high percentage of veterinarians who come from outside the province. At the time of the 1986 Census, veterinarians were located in the St. John's and Gander CEC areas.

Job Prospects

Employment in this occupation increased by 75 percent between 1981 and 1986. The number of veterinarians in the province has stabilized since 1986 but growth for the decade as a whole was still well above average. Although employment prospects to 1995 call for slower growth than experienced in the 1980s, the occupation is expected to expand faster than the average for all occupations. Indeed, the province of Newfoundland could support considerably more veterinarians than are presently employed here. However, a lack of qualified veterinarians wishing to set up practice in Newfoundland has hampered employment growth in the province. This problem should be alleviated somewhat in coming years as more and more Newfoundlanders graduate from the Atlantic Veterinary College in P.E.I. and take up practice in their home province. Most job openings are expected to occur in small animal practice (i.e. pets) as opposed to large animal practice (i.e. farm animals).

Veterinarians enjoy stable year-round employment and are not affected by fluctuations in economic activity. Many are self-employed.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 43,579
Highest 10% of Workers	N/A

Source: 1986 Census

Nurses, Registered, Graduate and Nurses-in-Training 3131

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	4,550	4.3	1.6	1,006
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	2,010	41
Grand Falls	230	4
Stephenville	130	0
Corner Brook	540	10
Labrador	115	3
Harbour Grace	200	0
Clarenville	45	2
Marystown	70	1
Gander	270	5

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	3	97	25	72	3	74	26
	1986	3	97	21	76	3	71	29
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (95)
- Hospitals (80)
- Health & Welfare, Non-Hospitals (14)

Public Administration (4)
- Provincial (4)

Nurses, Registered, Graduate and Nurses-in-Training

3131

Job Environment

Most nurses provide and supervise direct patient care. They observe, record and report symptoms and changes in the condition of patients; administer medication as ordered by the physician; give nursing advice and health counselling; supervise the work of nursing assistants; and ensure the comfort of their patients. Nurses work closely with physicians, social workers, physiotherapists, occupational therapists, technicians, nursing assistants and psychologists. Many nurses specialize in a particular type of health care, such as gerontology, chronic-care, surgery, psychiatry, emergency care and intensive care. Although most nurses work in hospitals, many are also employed in nursing homes, rehabilitation and long-term care centres, community health clinics, physician's offices, schools, industries and patients' homes. Prospective nurses must expect weekend and shift work, and rotation through a variety of wards or services.

Training and Qualifications

To become a registered nurse one must complete either a three-year hospital-based nursing program or a university degree program in nursing. Hospital-based nursing programs are available at St. John's and Corner Brook. Including the first year of general studies, the bachelor of nursing program at Memorial University takes five years to complete.

Nature of Supply

Most nurses in the province have graduated from a hospital based nursing program, although a relatively small percentage have completed a university degree in nursing. The occupation continues to be dominated by women, as men made up just three percent of the occupation in 1986. The proportion of young people in the occupation is equal to the labour force average. The relatively small percentage of older workers in the occupation suggests that many nurses move on to supervisory positions or opt for early retirement. The nursing profession is represented in all areas of the province.

Job Prospects

The number of nurses employed in the province increased significantly between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. Employment growth is expected to slow considerably to 1995 but will remain positive. This view is based on the outlook for hospitals and nursing homes, doctor's offices and the provincial government, where most nurses in the province are employed. A fairly high turnover rate will result in a considerable number of replacement openings by 1995.

Generally speaking, nurses enjoy stable year-round employment and are not affected by fluctuations in economic activity. However, employment levels are subject to government funding, so some positions may be lost during periods of fiscal restraint. The province's aging population suggests an increasing need for nurses in coming years. However this anticipated increase in demand may not be realized given government's limited financial resources.

A shortage of nurses exists in some rural areas of the province and in some specialty nursing categories such as critical care and geriatrics. The small number of U.I. beneficiaries in this occupation suggests a favourable nursing labour market compared to most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 16,185 or less
Average Worker	$ 23,968
Highest 10% of Workers	$ 29,960 or more

Source: 1986 Census

Registered Nursing Assistants 3134

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,652	2.9	1.2	562
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	965	26
Grand Falls	255	15
Stephenville	80	7
Corner Brook	215	7
Labrador	50	5
Harbour Grace	155	7
Clarenville	45	0
Marystown	85	8
Gander	215	13

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	9	91	26	72	2	79	21
	1986	15	85	13	83	4	83	17
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (98)
- Hospitals (55)
- Health and Welfare, Non-Hospitals (42)

Public Administration (2)
- Provincial (2)

Registered Nursing Assistants

3134

Job Environment

Nursing assistants are employed in hospitals, nursing homes, occupational health units, public health clinics, doctor's offices and the homes of patients. Typical duties include taking temperatures and blood pressures, giving baths, making beds, serving meals, feeding patients, collecting specimens and administering simple medical treatment. Nursing assistants often work as part of a team including registered nurses, physicians, physiotherapists and occupational therapists. They usually work under the direct supervision of a nurse. Weekend and shift work is normal in this career.

Training and Qualifications

This occupation requires the completion of a community college training course. The nursing assistant program offered at the Cabot Institute and various community colleges around the province is a one-year program consisting of theoretical and practical training. Graduates of this program are eligible for registration with the Council for Nursing Assistants.

Nature of Supply

Although this occupation is still dominated by women the proportion of male nursing assistants has been increasing. Men accounted for fifteen percent of the occupation in 1986 up from nine percent in 1981. Over the same period the proportion of young people in the occupation declined significantly. The number of older workers in the occupation remains below average, suggesting that many nursing assistants retire relatively early in their careers. The occupation is well represented in all areas of the province.

Job Prospects

Employment growth in this occupation is estimated to have been above average throughout the 1980s. This is not surprising given the dramatic employment expansion that has taken place in the province's health care sector over this period. Prospects are not as bright in coming years as the number of nursing assistants employed in the province is expected to grow at a slower than average rate to 1995. This view is based on the outlook for the health care sector where the vast majority of nursing assistants are employed. Employment prospects are very much dependant on government funding levels which will continue to be under pressure in the short term. However, given fairly high turnover in this occupational area, a significant number of replacement openings can be expected by the mid 1990s. Over the longer term, the province's aging population should lead to an increase in demand for nursing assistant services.

Nursing assistants enjoy stable year-round employment and are not affected by fluctuations in economic activity. As mentioned above, they are affected by government spending decisions however. Job prospects may be reduced during periods of government restraint. The number of U.I. beneficiaries in this occupation has been declining in recent years and is quite small given the size of the occupation. As such the labour market for nursing assistants compares favourably with most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 12,719 or less
Average Worker	$ 16,943
Highest 10% of Workers	$ 20,492 or more

Source: 1986 Census

Audiologists and Speech Language Pathologists 3136

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	35	6.4	1.1	6
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	10	0
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	5	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	40	60	N/A	N/A	N/A	N/A	N/A
	1986	0	100	20	80	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Hospitals (100)

Audiologists and Speech Language Pathologists 3136

Job Environment

Audiologists diagnose, evaluate and treat hearing disorders and conduct research related to hearing. Their responsibilities include administering audiometric tests and examinations to diagnose hearing impairment, planning and implementing rehabilitation programs (e.g., selecting and fitting hearing aids), and teaching medical interns and audiology students. Speech-language pathologists diagnose, evaluate and treat speech, language, voice and stuttering disorders and conduct related research. They administer tests and observe their patients in order to arrive at a diagnosis, plan individual or group therapy, conduct remedial programs, provide speech training, and counsel language-handicapped individuals and their families. In planning a treatment program audiologists and speech-language pathologists may work as members of a team that can include nurses, physicians, psychologists, social workers, educators and other therapists. Audiologists usually work in hospital laboratories, although some find employment in community health agencies and the school system. Speech-language pathologists are evenly distributed among school boards, hospitals and community-based agencies. Increasingly, audiologists and speech-language pathologists are operating private practices.

Training and Qualifications

To work in this field one should complete a masters degree in audiology or speech pathology. These programs are not offered at Memorial University but are available at several other universities in Canada including Dalhousie University in Nova Scotia and take anywhere from two to three years to complete. To qualify for these programs, one should complete an undergraduate degree with course work in linguistics, psychology and statistics.

Nature of Supply

At the time of the 1986 Census, all audiologists and speech language pathologists in the province were female. However given the large expansion that has taken place in this occupation during the 1980s, this picture may no longer be accurate. The lack of older workers in this occupational area reflects the emergence of this occupation in the province over the last decade. Audiologists and speech language pathologists tend to be located in the larger urban centers in the province.

Job Prospects

Employment in this occupational area was relatively low and stable in the early 1980s. However employment increased significantly since then and growth for the decade as a whole was well above average. Despite such a strong increase the number of audiologists and speech language pathologists employed in the province remains relatively small.

Employment growth in this occupational area is projected to be below average over the forecast period. This view is consistent with the outlook for the health care and education sectors where most audiologists and speech language pathologists are employed. However, growth could well exceed what is projected here should qualified personnel be available. Newfoundland has historically had a difficult time finding and retaining qualified personnel in this occupational area. While the situation has improved in recent years, some positions remain vacant. High turnover rates will also result in a number of replacement openings becoming available by 1995.

This occupational area offers stable year-round employment and is not affected by fluctuations in economic activity. However growth prospects may be limited during periods of government restraint. While employment may increase at a slower rate than would normally be the case, existing vacancies combined with a lack of qualified personnel make this an extremely attractive occupational area in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 33,730
Highest 10% of Workers	N/A

Source: 1986 Census

Physiotherapists 3137

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	113	2.0	2.1	32
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	45	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	0
Labrador	5	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	5	95	N/A	N/A	N/A	N/A	N/A
	1986	25	75	16	69	15	87	13
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Hospitals (69)
- Health and Welfare, Non-Hospitals (31)

Physiotherapists

3137

Job Environment

Physiotherapists plan and carry out treatment programs to maintain, improve or restore physical functioning in patients. Their duties include assessing a patient's physical abilities, planning and implementing the treatment program, maintaining clinical and statistical records, and developing and implementing educational programs for both staff and the community.

Physiotherapists may specialize in such areas as neurology, rheumatology, orthopaedics, obstetrics, paediatrics, cardiovascular disorders or sports physiotherapy. They may also specialize in research or consultation.

While individual physiotherapists may plan and implement a treatment program, they usually work as members of a health care team with other therapists, nurses, physicians, psychologists, social workers or educators. Most work in hospitals, but some practice in the patient's home, a rehabilitation centre or a community ambulatory clinic. Many physiotherapists are beginning to opt for private practice.

Training and Qualifications

To enter this occupational area, one should complete a university degree program in physiotherapy. Such a program is not offered at Memorial University but is available at other universities in Canada including Dalhousie University in Nova Scotia. To qualify for the three-year bachelors degree program offered at Dalhousie University individuals must complete one year of university study with course work in sciences.

Nature of Supply

Although the percentage of male physiotherapists in the province has been increasing, the occupation continues to be female dominated. Women accounted for three out of four physiotherapy positions in the province according to the 1986 Census. The higher than average proportion of older workers in the occupation suggests that many physiotherapists will be approaching retirement in coming years. Most physiotherapists in the province are located in the St. John's area.

Job Prospects

Employment growth in this occupation was slightly higher than average during the 1980's. Employment levels would have been higher had more qualified personnel been available. Newfoundland has traditionally had a difficult time recruiting and retaining sufficient numbers of physiotherapists to meet the province's needs. Recruitment from outside the province has resulted in fairly high turnover rates as many of these people stay for relatively short periods of time before moving on. As a result, a number of physiotherapist positions continue to go vacant.

Average growth is expected in this occupational area over the next five years, however this projection could be low should more qualified personnel become available. A significant number of replacement openings are also expected over this period.

This occupation offers stable year-round employment and is not affected by fluctuations in economic activity. However, since many physiotherapists are employed in hospitals, the occupation is sensitive to government spending decisions. Job prospects may be curtailed during periods of spending restraint. More and more physiotherapists are choosing to work for themselves or other physiotherapists in private practice as opposed to the traditional hospital setting. The labour market situation for physiotherapists remains extremely attractive when compared with most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 28,251
Highest 10% of Workers	N/A

Source: 1986 Census

Occupational Therapists 3138

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	60	2.7	1.5	18
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	30	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	0
Labrador	0	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	0	0
Gander	5	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	26	74	N/A	N/A	N/A	N/A	N/A
	1986	15	85	19	81	0	94	6
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (89)
- Hospitals (72)
- Health and Welfare, Non-Hospitals (17)

Public Administration (11)
- Provincial (11)

Occupational Therapists

3138

Job Environment

Occupational therapists plan and implement rehabilitation programs for people with physical or mental disabilities. Their responsibilities include assessing the emotional and physical capacities of patients, developing, implementing and evaluating treatment programs, and maintaining clinical and statistical records. Treatment involves encouraging patients to undertake day-to-day- activities, self care, creative tasks, and recreational activities or to develop industrial or vocational skills. Occupational therapists also conduct research, act as consultants and educators, and supervise auxiliary personnel. They may specialize in such areas as vocational rehabilitation, psychiatry, rheumatology and chronic care.

While most occupational therapists work in hospitals and other treatment centres, increasing numbers are finding employment in community settings such as schools and industry, and in private practice.

Training and Qualifications

To enter this field one must complete a bachelors degree program in occupational therapy. Such a program is not offered at Memorial University but is available at other universities in Canada including Dalhousie University in Nova Scotia. To qualify for the three-year program offered at Dalhousie University, individuals must complete one year of university study with course work in sciences.

Nature of Supply

In 1986, 85 percent of occupational therapists in the province were women compared to 74 percent in 1981. The percentage of young people in the occupation is roughly in line with the labour market average. The lack of older workers in the profession reflects the relatively recent expansion of occupational therapy in the province. It also reflects a relatively high turnover rate for this occupation in Newfoundland. Most occupational therapists in the province are located in the St. John's area.

Job Prospects

Employment growth in this occupational area was well above average during the 1980s. Employment levels would have been higher had qualified personnel been available. Newfoundland has traditionally had a difficult time recruiting and retaining occupational therapists. Many therapists have come from outside the province and as a result stay for relatively short periods of time. While the situation has improved in recent years, some occupational therapy vacancies still exist.

Employment prospects over the next five years call for average growth in this occupational area. Employment could increase faster than anticipated here should more qualified individuals become available. A number of replacement openings are also expected over this period.

This occupation offers stable year-round employment and is not affected by fluctuations in economic conditions. It is sensitive to government spending decisions however. Job prospects may be curtailed during periods of government spending restraint. The labour market for occupational therapists continues to be extremely attractive compared to most other occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 23,325
Highest 10% of Workers	N/A

Source: 1986 Census

Pharmacists 3151

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	376	9.1	3.2	97
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	175	3
Grand Falls	30	1
Stephenville	25	0
Corner Brook	25	1
Labrador	0	0
Harbour Grace	10	0
Clarenville	5	1
Marystown	15	0
Gander	20	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	84	16	0	100	0	100	0
	1986	68	32	2	90	8	97	3
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (85)
- Retail (83)
- Wholesale (2)

Services (15)
- Hospitals (15)

Pharmacists

3151

Job Environment

Most pharmacists work in either retail pharmacies or hospital pharmacies. The duties involved in this occupation include compounding and dispensing prescription drugs according to physicians' instructions, ensuring proper storage and handling of prescription drugs, giving advice to customers regarding appropriate home and over-the-counter remedies, checking records for overdoses and drug interactions and keeping records of prescriptions and drugs dispensed. Pharmacists who own or manage a pharmacy must also possess and exercise those skills normally required in running a successful business. Weekend and shift work is a possibility in this occupation.

Training and Qualifications

To qualify for licensure as a pharmacist, one must complete a university degree program in pharmacy. A bachelor of science degree program in pharmacy is available at Memorial University.

Nature of Supply

Most pharmacists in the province are community college graduates although a small percentage have completed a university degree. A university degree in pharmacy has only become mandatory in recent years. Most pharmacists in the province are men but the percentage of women in the profession has increased to 32 percent in 1986 from 16 percent in 1981. The lack of young people in the occupation is not surprising given the required educational qualifications. The percentage of older workers is equal to the labour market average. About half the pharmacists in the province are located in the St. John's area.

Job Prospects

Employment in this occupation increased by over 80 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been well above average. The introduction of a pharmacy degree program at Memorial University in the mid 1980's meant that no new graduates were entering the labour market in the latter half of the decade. This resulted in a short term shortage of pharmacists in the province. The situation has shown improvement as two classes have now graduated from the university program. A shortage of pharmacists still exists in some rural areas of the province. Employment growth is projected to be above average over the next five years. This view is based on the outlook for the retail trade and hospital sectors where most pharmacists are employed. A significant number of replacement openings are also expected over this period.

Pharmacists enjoy stable year-round employment and are not affected by fluctuations in economic activity. The low number of U.I. beneficiaries in this occupation is a reflection of the extremely attractive labour market presently facing pharmacists in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,690 or less
Average Worker	$ 31,214
Highest 10% of Workers	$ 50,604 or more

Source: 1986 Census

Dietitians and Nutritionists 3152

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	120	9.7	3.1	49
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	50	2
Grand Falls	15	0
Stephenville	5	0
Corner Brook	15	1
Labrador	0	0
Harbour Grace	0	1
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	0	100	0	100	0	83	17
	1986	0	100	22	78	0	89	11
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (89)
- Accommodation & Food (44)
- Hospitals (33)
- Health and Welfare, Non-Hospitals (6)

Public Administration (11)
- Provincial (11)

Dietitians and Nutritionists 3152

Job Environment
Dietitians and nutritionists have a variety of responsibilities, which may include consulting and lecturing on nutrition; planning menus and diets; developing, administering and supervising institutional food service programs; teaching medical students; conducting research; and developing computer programs for administrative and clinical purposes. Usually, dietitians work in health-care and related facilities, although an increasing number are self-employed consultants. Some are employed in the education, government and manufacturing sectors.

Training and Qualifications
To become a dietitian, one should complete a bachelor of science honours degree in dietetics. This is a five-year program including the first year of general studies. The first three years of the program are available at Memorial University. The fourth year of study can be completed at Acadia University in Nova Scotia. Students would then return to M.U.N. for the final year of the program. Graduates of this program must undertake a one-year approved dietetic internship prior to professional certification. Memorial University also offers bachelor of science degrees with major or honours in food science and in nutrition.

Nature of Supply
These occupations continue to be dominated by women. They accounted for 100 percent of employment in this occupational area in 1986. The percentage of young people is roughly in line with the provincial labour market average. The lack of older workers reflects the fairly recent emergence of these occupations in the province. At the time of the 1986 Census, dietitians and nutritionists were concentrated in the larger urban centres of the province.

Job Prospects
Employment in this occupation increased by 80 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been well above average. The rate of increase is expected to slow over the next five years but should still be above the average for all occupations. This view is based on the outlook for food services, hospitals and the provincial government where most dieticians and nutritionists are employed.

These occupations enjoy stable year-round employment and are not affected by fluctuations in economic conditions. They are somewhat sensitive to government spending decisions. Job prospects may be curtailed during periods of fiscal restraint. Dieticians and nutritionists presently enjoy favourable labour market conditions in the province. This is reflected in the low number of U.I. beneficiaries in these occupations.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 26,312
Highest 10% of Workers	N/A

Source: 1986 Census

Optometrists

3153

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	33	-1.8	3.9	17
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre		
CEC Area	**1986 Employment**	**September, 1990 Regular U.I. Beneficiaries**
St. John's	15	0
Grand Falls	0	0
Stephenville	5	0
Corner Brook	15	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	70	30	0	100	0	100	0
	1986	86	14	0	100	0	80	20
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Health and Welfare, Non-Hospital (100)

Optometrists

3153

Job Environment

Optometrists examine patients' eyes to determine visual efficiency, and prescribe treatment (excluding drugs or surgery) to correct vision or ocular disorders. They analyze vision through a series of tests with sophisticated instruments and, depending on their findings, refer patients to medical practitioners such as ophthalmologists, prescribe and fit corrective lenses such as eye glasses and contact lenses, or recommend eye exercises. Optometrists also advise or counsel patients on such questions as contact lens care, visual hygiene, lighting arrangements and visual safety. Most optometrists operate a complete vision care service by supplying the materials used in their own prescriptions and usually work alone in private practice, although group practice is becoming increasingly popular. Employment opportunities also exist in optometry clinics, community health centres, and in consulting work for government and industry.

Training and Qualifications

To become an optometrist, one must complete a university degree program in optometry. The four-year program offered at the University of Waterloo in Ontario is the only one of its kind in Canada available to english students. To qualify for admission to this program one must complete two years of university with emphasis on the sciences.

Nature of Supply

This occupation tends to be dominated by men. Women accounted for 14 percent of optometrists in the province according to the 1986 Census. The lack of young people in this occupation is not surprising given the educational requirements to become an optometrist. The lack of older workers suggests a fairly young average age for the occupation. Optometrists tended to be concentrated in the larger urban centres of the province at the time of the 1986 Census.

Job Prospects

Employment in this occupation showed very little change during the 1980s. The province could support more optometrists if trained personnel were available. However, relatively few Newfoundlanders are able to gain entry to the country's only school of optometry and hence the supply of new entrants into the profession tends to be very limited in this province.

This occupation should experience above average employment growth over the next five years. However, this forecast may be overly optimistic since qualified personnel may not be available. The vast majority of optometrists are self-employed so unemployment in the occupation is extremely rare.

This occupation enjoys stable year-round employment and is not affected by fluctuations in economic activity. The labour market for optometrists is extremely attractive and should remain so for the foreseeable future.

1985 Annual Earnings

Lowest 10% of Workers	$ N/A
Average Worker	$ N/A
Highest 10% of Workers	$ N/A

Source: 1986 Census

Dispensing Opticians 3154

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	93	4.9	3.0	23
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	40	0
Grand Falls	5	1
Stephenville	0	0
Corner Brook	5	0
Labrador	5	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	0	0
Gander	5	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	73	27	0	100	0	100	0
	1986	53	47	22	72	6	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (40)	Services (35)	Manufacturing (25)
- Retail (40)	- Health & Welfare, Non-Hospitals (35)	- Miscellaneous (25)

Dispensing Opticians 3154

Job Environment

Dispensing opticians order, fit and adapt ophthalmic devices (such as eye glasses, contact lenses and magnifiers) according to the instructions of an ophthalmologist or optometrist. Their responsibilities include checking prescriptions, using optical instruments to obtain eye measurements (such as curvature), assisting customers with the selection of frames, providing advice concerning lenses, ordering prescriptions from an optical laboratory, verifying lens accuracy and modifying frames to ensure proper fit. They also instruct customers in the proper techniques of contact lens use and care. Most dispensing opticians are employed by optical retail outlets, although a small percentage are self-employed.

Training and Qualifications

One can enter this occupation in two ways. One method requires high school graduation and the completion of a two-year community college program in ophthalmic dispensing. No such program is available in this province but is offered at the Georgian College of Applied Arts and Technology in Barrie, Ontario.

The usual method of qualification in Newfoundland is through a minimum of two years of on-the-job training under the supervision of a qualified optician in combination with a correspondence course offered by the Canadian Guild of Dispensing Opticians.

Nature of Supply

Most people in this occupation have completed high school and about half have undertaken some form of post-secondary education. At 47 percent, the percentage of women in this occupation is higher than the all-occupation average. This represents a big increase over 1986 when only one out of four opticians in the province was female. The age distribution for this occupation is roughly in line with the provincial labour market average. At the time of the 1986 Census, about two-thirds of opticians in the province resided in the St. John's area.

Job Prospects

Employment growth in this occupation was well above average during the 1980s as the number of opticians in the province increased dramatically. Slower growth is anticipated over the next five years but the occupation should still expand faster than the average rate for all occupations. A limited number of replacement openings are also expected over this period. An aging population; expanded childhood testing; and a trend toward owning more than one pair of corrective lenses should positively affect the demand for optician services.

Opticians enjoy stable year-round employment and are only mildly affected by fluctuations in economic conditions. Since the majority of opticians are trained on the job, unemployment in the occupation is fairly rare. This is reflected in the low number of U.I. beneficiaries in the occupation.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 19,912
Highest 10% of Workers	N/A

Source: 1986 Census

Medical Radiation Technologists 3155

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	209	0.5	1.7	34
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	95	3
Grand Falls	30	1
Stephenville	15	0
Corner Brook	15	1
Labrador	0	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	5	1
Gander	15	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	44	56	29	71	0	93	7
	1986	51	49	13	84	3	79	21
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Hospitals (88)
- Health and Welfare, Non-Hospitals (12)

Medical Radiation Technologists

3155

Job Environment

Medical radiation technologists employ radioactive chemicals and equipment for diagnostic and therapeutic purposes. Specialists in this field include nuclear medicine technologists, diagnostic radiographers and radiation therapy technologists. Technologists in nuclear medicine use measured doses of radioactive materials to carry out tests on patients. Radiographers take and process X-ray images. Radiation therapy technologists administer ionizing radiation to treat such diseases as cancer. Medical radiation technologists work under the direction of a specialized physician, generally in a hospital setting. The comfort and safety of their patients are the responsibility of all technologists in this field.

Training and Qualifications

To become a medical radiation technologist one must complete an institute of technology program in medical radiography. The Cabot Institute offers a three-year program in medical radiography. Graduates of this program can undertake an additional year of study in diagnostic ultrasonography also available at the Cabot Institute, to become an ultrasound technologist. Additional training to become a nuclear medicine technologist or radiotherapy technologist is not available in Newfoundland but is offered in Nova Scotia or other provinces.

Nature of Supply

Most radiation technologists and technicians in the province have completed an Institute of Technology program in medical radiography. The occupation is equally divided between men and women. The proportion of young people in the occupation decreased considerably between 1981 and 1986, suggesting that job opportunities over this period were more scarce than during the 1970s. The percentage of older workers has increased but was still below the all-occupation average according to the 1986 Census. About half the medical radiation technologists in the province are located in the St. John's area.

Job Prospects

Employment in this occupation is estimated to have increased during the 1980s but growth was slightly below the average for all occupations. Prospects are expected to improve over the next five years, however growth is expected to continue to be below average. The view is consistent with the outlook for the health care sector and in particular hospitals where most people in these occupations are employed. Within this occupational group, opportunities may be better for ultrasound, radiotherapy, and nuclear medicine technologists as the number of technologists with training in these specialties is limited.

Medical radiation technologists enjoy stable year-round employment and are not affected by fluctuations in economic activity. These occupations are sensitive to government spending decisions however. Job opportunities may be curtailed during periods of government spending restraint. Relative to employment, the number of U.I. beneficiaries in this occupational area is well below the provincial labour market average. This suggests a fairly attractive labour market for medical radiation technologists in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 22,415 or less
Average Worker	$ 27,566
Highest 10% of Workers	$ 33,237 or more

Source: 1986 Census

Medical Laboratory Technologists 3156

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	684	1.4	1.5	122
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	340	2
Grand Falls	65	0
Stephenville	20	0
Corner Brook	65	1
Labrador	10	2
Harbour Grace	25	0
Clarenville	15	0
Marystown	5	0
Gander	35	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	40	60	26	74	0	93	7
	1986	39	61	14	84	2	94	6
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (96)
- Hospitals (85)
- Education (5)
- Health & Welfare, Non-Hospitals (5)

Public Administration (4)
- Provincial (4)

Medical Laboratory Technologists 3156

Job Environment

Medical laboratory technologists collect samples from patients, conduct tests, microscopic examinations, experiments and chemical analyses on blood, tissues, cells and other samples to assist doctors in the diagnosis, treatment and prevention of diseases, and set-up, clean and maintain laboratory equipment.

These technologists may specialize in such areas as biochemistry, cytotechnology, haematology, immunology and microbiology. They are employed in hospitals, clinics, private medical laboratories, government, industry and universities.

Training and Qualifications

These occupations require the completion of a community college/institute of technology program in medical laboratory technology. The Cabot Institute offers a three-year program in medical laboratory technology consisting of two years of classroom instruction and one year of practical training. Graduates of this program who have registered with the Canadian Society of Laboratory Technologists are eligible for admission to the one-year cytology program administered by the Cabot Institute.

Nature of Supply

Most people in this occupation have completed a community college/institute of technology program in health sciences or physical sciences. Women account for a slight majority in this occupational area at 60 percent. The proportion of young people in the occupation dropped significantly between 1981 and 1986, suggesting job opportunities became relatively scarce over this period compared to the 1970s. The proportion of older workers is also below average. This may indicate that some technologists move on to supervisory positions or opt for early retirement. Approximately 60 percent of medical laboratory technologists in the province resided in the St. John's area at the time of the 1986 Census.

Job Prospects

Employment in this occupation increased at about the average rate for all occupations during the 1980s. This represents a considerable slowdown from the 1970s when the number of laboratory technologists in the province doubled. Employment growth over the next five years is expected to be slightly below average. This view is consistent with the outlook for the health care sector and in particular hospitals, where most medical laboratory technologists are employed. A significant number of replacement openings are also expected over this period. Employment prospects may be somewhat better for those technologists who have completed additional training in cytology.

This occupation offers stable year-round employment and is not affected by fluctuations in economic activity. It is sensitive to government spending decisions however, and job opportunities may be curtailed during periods of government spending restraint. Compared to most occupations in the province, labour market circumstances facing medical laboratory technologists are relatively good. This is reflected in the extremely low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,077 or less
Average Worker	$ 25,374
Highest 10% of Workers	$ 32,813 or more

Source: 1986 Census

Denturists 3157

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	16	.7	3.5	3
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	5	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	5	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	N/A	N/A	N/A	N/A	N/A
	1986	100	0	0	100	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (67)
- Health & Welfare, Non-Hospital (67)

Manufacturing (33)
- Miscellaneous (33)

Denturists

3157

Job Environment

Denturists are an independent professional group organized under licensing authority. Their duties include measuring patients' jaws to determine denture size and shape; making impressions of patients' teeth, gums and jaws; designing dentures to specifications; and constructing, fitting, modifying and repairing dentures. Denturists work largely without the supervision of a dentist and are a self-governing occupation providing an alternative to the services of a dentist in a particular aspect of dental health care.

Denturists generally work as employees or owner-operators of a business. Where they own or manage the establishment in which they work, denturists must have, in addition to the skills of their profession, the management and leadership abilities required to run a successful business.

Training and Qualifications

To become a denturist, one must complete a two- or three-year community college program in denture technology followed by one year of practical experience under the supervision of a licensed denturist. Denturist programs are not available in this province but are offered in Nova Scotia as well as other provinces.

Nature of Supply

Most people in this occupation have completed some sort of post-secondary training. At the time of the 1986 Census, the occupation was completely male-dominated. There were no young people or older workers in the occupation at that time. For the most part, denturists are found in the larger urban areas of the province.

Job Prospects

Despite a significant increase in the number of denturists practicing in the province between 1981 and 1986, the occupation remains relatively small. Growth for the 1980's as a whole is estimated to have been positive but below average. Growth rates may have been higher had more qualified denturists been available. Prospects for the occupation remain attractive with higher than average growth expected over the next five years. This view is based on the outlook for non-hospital health services and miscellaneous manufacturing where most denturists in the province are employed. Actual employment levels may fall short of what is projected here due to a lack of qualified personnel. While competition is fairly stiff in the larger urban centres of the province, opportunities exist in many smaller centres. However, given the relatively attractive labour market for denturists throughout Canada, many new graduates may opt to set up practise elsewhere.

Denturists enjoy stable year-round employment and are not significantly affected by fluctuations in economic activity. Since most denturists are self-employed, unemployment in the occupation tends to be relatively rare. This is reflected in the low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 18,200
Highest 10% of Workers	N/A

Source: 1986 Census

Dental Hygienists, Dental Assistants 3158

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	172	0.5	4.5	63
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	75	5
Grand Falls	15	3
Stephenville	0	2
Corner Brook	25	3
Labrador	10	2
Harbour Grace	5	4
Clarenville	0	1
Marystown	0	0
Gander	20	6

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	6	94	N/A	N/A	N/A	N/A	N/A
	1986	0	100	36	64	0	70	30
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Health and Welfare, Non-Hospital (97)
- Hospitals (3)

Dental Hygienists, Dental Assistants 3158

Job Environment

Dental hygienists and dental assistants generally find work in a private dentist's office, although employment opportunities also exist in schools, hospitals and public health clinics.

The dental hygienist's major responsibility is the promotion of oral health, which includes conducting dental examinations, consulting with the dentist on patient care, cleaning and polishing teeth, taking X-rays and impressions, instructing patients in proper dental care techniques and providing related services.

Dental assistants prepare the patient for treatment, sterilize instruments, assist the dentist at chairside, process X-rays, prepare solutions and fillings for treatment, and assume day-to-day clerical responsibilities.

Training and Qualifications

Dental hygienists must be licensed to practice in Newfoundland. To qualify for licensure, one must complete a community college or university-based program in dental hygiene which takes a minimum of two years. No such programs are available in Newfoundland but are available in other provinces. The program offered at Dalhousie University in Nova Scotia is a two-year diploma program.

While there are no set educational requirements to become a dental assistant, employment prospects are greatly enhanced with the completion of a training course. The Newfoundland Career Academy offers an eleven-month dental assistant program.

Nature of Supply

All dental hygienists in the province have completed a post-secondary program as a condition for licensing. The majority of dental assistants have no formal program of study but received their training on the job. This occupational area was entirely dominated by women at the time of the 1986 Census. The percentage of young people in these occupations was considerably higher than average. The lack of older workers in the occupation suggests that many dental assistants retire relatively early in their careers. Dental hygienists and dental assistants can be found in most areas of the province.

Job Prospects

Employment in these occupations showed little change between 1981 and 1986 and growth for the decade as a whole is estimated to have positive but below average. Higher than average growth is expected over the next five years based on the outlook for non-hospital health services where most dental hygienists and dental assistants are employed.

Dental assistants account for the vast majority of employment in this occupational area. The number of dental hygienists employed in the province would no doubt be higher, were more qualified personnel available. The very attractive labour market for hygienists throughout Canada makes it difficult to attract recent graduates to remote areas of the province.

Generally speaking, dental hygienists and dental assistants enjoy stable year-round employment and are not significantly affected by fluctuations in the level of economic activity. This is reflected in the relatively low number of U.I. beneficiaries given the number of people employed in this occupational area. Dental assistants accounted for all the beneficiaries shown here.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 13,872
Highest 10% of Workers	N/A

Source: 1986 Census

Dental Laboratory Technologists 3161

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	32	-6.7	3.5	11
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	20	2
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	90	10	N/A	N/A	N/A	N/A	N/A
	1986	67	33	20	80	0	83	17
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (50)
- Miscellaneous (50)

Services (50)
- Health and Welfare, Non-Hospital (50)

Dental Laboratory Technologists 3161

Job Environment
Following the prescription of a dentist, dental laboratory technologists alter, repair and make artificial dental devices such as removable dentures, bridgework, inlays, crowns and orthodontic appliances. They also sometimes instruct and supervise junior colleagues and provide other management services for the dental laboratory in which they work.

Dental laboratory technologists generally work either as employees or as owner-operators in commercial dental laboratories. Where they own or manage the establishment in which they work, they must have, in addition to the skills of their profession, the management and leadership abilities required to run a successful business.

Training and Qualifications
Dental laboratory technologists can be trained on the job or through the completion of a community college program. No such programs are available in Newfoundland but are available elsewhere. The Institute of Technology in Nova Scotia offers a two-year program in dental technology.

Nature of Supply
About half the dental laboratory technologists in the province have completed a community college program. The remaining technologists received their training on the job. Women accounted for one-third of employment in this occupational area at the time of the 1986 Census compared to just 10 percent in 1981. The proportion of young people in the occupation was roughly in line with the labour force average. Dental laboratory technologists tend to be employed in the province's larger urban centres.

Job Prospects
Employment in this occupation declined by 40 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Higher than average growth is expected over the next five years based on the outlook for miscellaneous manufacturing and non-hospital health services where these positions are concentrated. Relatively few replacement openings are expected over this period, however.

Dental laboratory technologists enjoy stable year-round employment and are not affected by fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 18,302
Highest 10% of Workers	N/A

Source: 1986 Census

Respiratory Therapists 3162

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	22	3.5	10.4	18
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	15	0
Grand Falls	5	0
Stephenville	0	0
Corner Brook	5	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	55	45	N/A	N/A	N/A	N/A	N/A
	1986	43	57	29	71	0	86	14
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (100)
- Hospitals (100)

Respiratory Therapists

3162

Job Environment

Respiratory therapists assist physicians in the diagnosis and treatment of respiratory and cardiopulmonary disorders by performing diagnostic tests and administering and evaluating respiratory therapy treatments. Their primary responsibilities include performing diagnostic tests (such as arterial blood gas analysis and tests of cardiopulmonary functions); operating respiratory equipment to administer treatments involving oxygen, oxygen-air mixtures, humidified air or medications as directed by physicians; performing tests to evaluate the effectiveness of treatments; and cleaning, sterilizing and performing minor repairs on respiratory equipment. Respiratory therapists also train and supervise student therapists and others in the profession. With experience, people in this field can specialize in areas such as critical care, pediatrics and diagnostic procedures, and further training may lead to employment as a cardiovascular perfusionist. Most respiratory therapists work in hospitals, although a small and increasing number are finding work in medical clinics and respiratory home care companies.

Training and Qualifications

To enter this occupation, one must complete a community college program in respiratory therapy. The program at the Cabot Institute takes three years to complete. Graduates of this program are eligible for membership with the Canadian Society of Respiratory Therapists.

Nature of Supply

Women accounted for a slight majority of employment in this occupation according to the 1986 Census. The proportion of young people in the occupation was slightly higher than the provincial labour market average. The lack of older workers is not surprising giving the fairly recent emergence of this occupation in the province. At the time of the 1986 Census, most respiratory therapists were located in the larger urban areas of the province.

Job Prospects

Despite higher than average employment growth during the 1980s, the number of respiratory therapists employed in the province remains relatively low. Indeed, employment levels would be higher were qualified personnel available. Several vacancies in the province go unfilled because of a lack of trained personnel. This shortage exists not only in Newfoundland but in the rest of Canada and the United States as well.

The provincial shortage will be alleviated to some extent as the first graduating class from the Cabot Institute's respiratory therapy program enters the labour market in 1992. Employment in the occupation is expected to increase dramatically over the next five years as this new supply becomes available. As such, employment growth is expected to be well above average for the next few years. Given the attractive labour market for respiratory therapists outside the province, high turnover may result in a significant number of replacement openings.

This occupation offers stable year-round employment and is not affected by fluctuations in economic activity. However, because hospitals where respiratory therapists are employed are government funded, job opportunities may be curtailed during periods of government spending restraint. Labour market conditions presently facing respiratory therapists in the province are extremely favourable.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 28,060
Highest 10% of Workers	N/A

Source: 1986 Census

Advertising and Illustrating Artists 3314

Employment Trends	**Number of Jobs 1990**	**Average Annual Growth Rates (%) Estimated 1981 - 1990**	**Projected 1990 - 1995**	**Number of Job Openings 1990 - 1995**
This Occupation	140	8.9	3.5	46
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	90	14
Grand Falls	0	0
Stephenville	0	0
Corner Brook	5	2
Labrador	0	0
Harbour Grace	10	0
Clarenville	0	0
Marystown	5	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	85	15	0	100	0	100	0
	1986	54	46	25	71	4	77	23
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (46)
- Business (29)
- Education (13)
- Miscellaneous (4)

Manufacturing (29)
- Printing & Publishing (21)
- Shipbuilding (4)
- Miscellaneous (4)

Transport, Communications & Utilities (17)
- Radio & TV Broadcasting (17)

Advertising and Illustrating Artists

3314

Job Environment

Persons working in this occupational group are called upon to create and execute designs, illustrations, cartoons and caricatures for reproduction in newspapers, books, magazines, signs and other visual media. Individuals in this field must be able to blend technical skills with creative flair and be capable of interpreting specific problems through the use of contemporary materials.

Training and Qualifications

These positions usually require high school graduation and the completion of a community college program in Commercial Art. The Cabot Institute offers a ten-month pre-employment course in Commercial Art. This program is intended to prepare graduates for employment with commercial art studios, advertising agencies and television graphic and film departments. More extensive training in this field can be obtained at the Nova Scotia College of Art and Design in Halifax.

Nature of Supply

Most advertising and illustrating artists in the province have completed some type of post-secondary training. The most common area of study is fine and applied arts. The proportion of women in this occupational area increased from just 15 percent in 1981 to 46 percent in 1986. The percentage of young people in the occupation was slightly higher than average while the number of older workers in the occupation was slightly below average. The majority of advertising and illustrating artists in the province reside in the St. John's area.

Job Prospects

Employment in this occupational area increased by over 75 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. The largest increase occurred in the printing and publishing industry. Employment growth over the next five years is expected to slow compared to the previous decade but should still be well above average. This view is based on the outlook for industries which employ these types of artists, in particular business services such as advertising firms, the printing and publishing industry and radio and T.V. broadcasting. In addition, a significant number of replacement openings are also expected over this period.

For the most part, advertising and illustrating artists enjoy stable year-round employment and are not affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in this occupation is well below the average for all occupations. This suggests that the labour market circumstances facing advertising and illustrating artists is better than average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 21,122
Highest 10% of Workers	N/A

Source: 1986 Census

Photographers and Camera Operators 3315

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	104	2.7	1.9	15
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	65	4
Grand Falls	0	2
Stephenville	15	3
Corner Brook	5	2
Labrador	0	1
Harbour Grace	10	1
Clarenville	0	0
Marystown	5	0
Gander	0	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	85	15	35	65	0	77	23
	1986	81	19	19	81	0	82	18
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (85)
- Miscellaneous (55)
- Education (20)
- Business (5)

Public Administration (15)
- Provincial (10)
- Local (5)

Photographers and Camera Operators

3315

Job Environment

People in this group include commercial, industrial and aerial photographers as well as television and news camera operators. They may photograph people, events or materials, or film motion-pictures, television scenes or news events. The work is either on location or in studios and laboratories and can involved extensive travel. Experience in these occupations may lead to supervisory and management positions.

Training and Qualifications

While there are no formal requirements for these occupations, employment prospects are greatly enhanced with the completion of a post-secondary program. The Newfoundland Career Academy offers a fourteen-week program in photographic studies. University and community college programs in photography and television, news, and motion picture camera operation are not offered in Newfoundland but are available in other provinces. Ryerson Polytechnical Institute in Ontario offers degree programs in photographic arts and radio and television arts.

Nature of Supply

While most photographers and camera operators in the province have some form of post-secondary education, very few have completed formal educational training in their occupational area. This is not surprising since formal training in this area had not been readily available in the province.

While men continue to dominate these occupations the percentage of women has been increasing. According to the 1986 Census one out of five photographers and camera operators in the province were women. The percentage of young people in this occupational area was about equal to the overall average in 1986.

Job Prospects

Employment in these occupations increased slightly between 1981 and 1986 and growth for the decade as a whole is estimated to have been above average. Employment growth over the next five years is expected to approach the all-occupation average. This view is based on the outlook for industries which employ these occupations, particularly miscellaneous services. A small number of replacement openings are also expected over this period.

This occupational area offers stable year-round employment and is not significantly affected by fluctuations in economic activity. Relative to employment, the number of U.I. beneficiaries in this occupational area is well below the average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 21,094
Highest 10% of Workers	N/A

Source: 1986 Census

Radio and Television Announcers 3337

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	128	-1.4	1.1	12
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	70	7
Grand Falls	10	1
Stephenville	5	1
Corner Brook	15	3
Labrador	30	5
Harbour Grace	5	0
Clarenville	0	0
Marystown	5	1
Gander	0	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	87	13	32	68	0	97	3
	1986	74	26	31	69	0	93	7
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications and Utilities (100)
- Radio and TV Broadcasting (100)

Radio and Television Announcers

3337

Job Environment

This occupational group includes broadcasters, disc jockeys, sportscasters and newscasters. They prepare, broadcast and comment on news, sports and current events over radio and television, and select and announce musical recordings. Their work is usually done in a radio or television studio or at a sports or entertainment event.

Training and Qualifications

Educational requirements for these occupations vary but employment prospects are greatly enhanced with the completion of a university degree or community college program in journalism, broadcasting or a related subject. Voluntary experience with a campus or college station would provide valuable exposure to the field. The two-year journalism program offered at the West Coast Community College includes courses in broadcast journalism. Programs in radio and television broadcasting are available at various colleges and universities across the country.

Nature of Supply

About half the radio and television announcers in the province had some form of post-secondary education according to the 1986 Census. Those that did had a wide range of subject areas. This is not surprising since courses in radio and T.V. broadcasting are not available in this province.

While these positions continue to be dominated by men, the number of women in the field has been increasing. By 1986, one out of four announcers in the province were women. This occupation has a higher than average percentage of young people suggesting that many of these are entry-level positions. The lack of older workers in this occupational area suggests that many people move on to other positions later in their careers. Employment in this occupation is distributed throughout the province.

Job Prospects

Employment in this occupational area declined slightly between 1981 and 1986 and growth for the 1980s as a whole is estimated to have been negative. Employment is expected to expand over the next five years but at a below-average rate compared to all occupations. Relatively few replacement openings are expected over this period.

Radio and television announcers enjoy stable year-round employment and are not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in these occupations is slightly below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 30,363
Highest 10% of Workers	N/A

Source: 1986 Census

Writers and Editors 3351

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	338	4.5	2.9	77
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	210	5
Grand Falls	25	2
Stephenville	0	1
Corner Brook	15	2
Labrador	0	1
Harbour Grace	5	0
Clarenville	5	0
Marystown	0	0
Gander	10	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	65	35	29	71	0	89	11
	1986	65	35	22	62	16	78	22
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (34)
- Miscellaneous (16)
- Education (9)
- Business (4)

Manufacturing (30)
- Printing & Publishing (30)

Transport, Communications and Utilities (27)
- Radio & TV Broadcasting (25)
- Telecommunications (2)

Writers and Editors

3351

Job Environment

This occupational group includes newspaper reporters, columnists, magazine editors, authors and other writers and editors who work on a permanent or free-lance basis. Writers research, prepare and write material for publications such as newspapers, books, magazines, technical manuals and trade journals. Editors for newspapers and magazines select and review materials to be published and co-ordinate publication activities. Other editors clarify and reorganize written material. Although creative writing is included in this category, most positions in this field require writers to approach their work less as a creative exercise and more as a highly skilled craft. News writers and technical writers, for example, are more concerned with providing accurate, concise information than with creativity.

Occupations in this field often lead to middle and senior management positions, and to opportunities in writing-related occupations, such as public relations and teaching.

Training and Qualifications

Entry requirements for this occupation vary but employment prospects are greatly enhanced with the completion of a university degree or community college program in journalism. A university degree in english could also lead to employment in this field. The Western Community college offers a two-year program in journalism. A degree program in journalism is available at several universities in Canada including Carlton University in Ontario.

Nature of Supply

Most people in these occupations have some type of post-secondary education and a significant percentage have completed a university degree.

In 1986, women accounted for 35 percent of employment in these occupations, unchanged from 1981. The percentage of young people in this occupational area was equal to the provincial labour force average. The proportion of older workers in the group was twice the all-occupation average. This suggests that some jobs may become available in coming years as those currently in the positions move on to retirement. While most writers and editors live in the St. John's area, the occupations are represented in most other areas of the province.

Job Prospects

Employment in these occupations increased by over 30 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. Slower growth is expected over the next five years but employment should still expand at a slightly higher rate than the average for all occupations. This view is based on the outlook for a number of industries which employ writers and editors, particularly the printing and publishing industry. About one-third of the vacancies that arise over this period are expected to be replacement openings.

Generally speaking, writers and editors enjoy stable year-round employment and are not usually affected by fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries compared to employment in these occupations. The introduction of word processors has enabled writers and editors to perform their duties more efficiently but has not had a negative impact on employment levels. Part-time work and self-employment (free-lance work) are fairly common in these occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 14,815 or less
Average Worker	$ 28,943
Highest 10% of Workers	$ 42,847 or more

Source: 1986 Census

Secretaries and Stenographers 4111

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	4,642	0.5	1.9	1,350
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	2,475	394
Grand Falls	290	101
Stephenville	170	54
Corner Brook	495	94
Labrador	200	60
Harbour Grace	155	51
Clarenville	115	41
Marystown	110	16
Gander	235	60

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	0	100	36	60	4	88	12
	1986	0	100	26	71	3	86	14
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (48)	Public Administration (23)	Finance, Insurance and Real Estate (9)
- Education (16) - Business (10) - Hospitals (9)	- Provincial (15) - Federal (5) - Local (3)	

Secretaries and Stenographers 4111

Job Environment

Secretaries, including clerk-stenographers, departmental, legal and medical secretaries, perform a variety of office duties such as typing, shorthand, answering telephones, opening mail, filing, photocopying and drafting letters. They also may be required to understand technical languages used in a particular profession, such as commerce, law or medicine.

The introduction of automated office equipment is redefining the role of a secretary into one that is more like an information worker. Personal computers are changing the structure of secretarial work by creating tasks using spreadsheets, graphics and database programs. Since word processors result in higher productivity, many traditional tasks of the secretary/typist are disappearing, but at the same time, new opportunities are being created in other areas.

Training and Qualifications

These occupations usually require high school graduation and the completion of a community college course in secretarial studies. A two-year program in secretarial science with options in word processing, administrative, legal and medical fields is available at the Cabot Institute. Similar programs are also available at the Fisher Institute and the Labrador Community College. Pre-employment courses in stenography lasting less than a year are available at the Cabot Institute and various community colleges around the province. Many private colleges in the province also offer programs of varying duration in secretarial studies.

Nature of Supply

Roughly three-quarters of people employed in this occupational area have completed some form of post-secondary education, usually in the secretarial field but sometimes in other subject areas. Virtually all secretaries and stenographers in the province were women at the time of the 1986 Census. The percentage of young people in these occupations was slightly higher than the average for all occupations. Older workers accounted for just 3 percent of employment in this occupation compared to 8 percent overall. This suggests that many secretaries move on to supervisory or other positions or opt for early retirement. The occupation is represented in all areas of the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been positive but below average. The outlook for secretaries and stenographers over the next five years calls for employment growth equal to the average for all occupations. This view is based on the outlook for public administration, education, business and hospital services and the finance sector where most secretaries in the province are employed. Roughly two-thirds of all vacancies that arise over the next five years will be replacement openings that arise as those in the positions retire, or leave to raise a family or for other reasons. Movement into and out of the workforce is fairly common in these occupations.

Most secretaries and stenographers enjoy stable year-round employment and are not significantly affected by fluctuations in economic activity. Some positions, particularly in the private sector, could be vulnerable during periods of economic recession. With so many secretaries and stenographers in this province employed either directly for government or indirectly in hospitals and education, job opportunities may be curtailed during periods of government spending restraint. The number of U.I. beneficiaries relative to employment in this occupation is equal to the overall average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 11,193 or less
Average Worker	$ 16,233
Highest 10% of Workers	$ 21,627 or more

Source: 1986 Census

Typists and Clerk Typists 4113

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,416	-1.7	0.5	278
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	795	61
Grand Falls	60	3
Stephenville	40	9
Corner Brook	150	17
Labrador	60	12
Harbour Grace	55	5
Clarenville	65	13
Marystown	45	6
Gander	120	15

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	3	97	47	50	3	86	14
	1986	3	97	24	74	2	85	15
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (44)
- Hospitals (15)
- Education (13)
- Business (9)

Public Administration (32)
- Provincial (20)
- Federal (8)
- Local (4)

Finance, Insurance and Real Estate (10)

Typists and Clerk Typists

4113

Job Environment

This category includes clerk-typists, word processing operators, teletypists and transcribing-machine operators. Depending on their particular function, these workers may operate typewriters, word processors, composing machines, teleprinters or microcomputers in various environments ranging from a large typing pool to a small office. With the introduction of automated equipment and different software programs, typists must frequently upgrade their skills.

Training and Qualifications

To enter this occupational area, one should graduate from high school and complete a typing course. The Cabot Institute offers a ten-month course in clerk typing. Most community colleges in the province offer nine-month programs in word processing and receptionist/typist. In addition, several private colleges in the province offer similar courses of varying duration.

Nature of Supply

About 80 percent of typists and clerk typists in the province have some form of post-secondary education, usually a community college diploma in the clerical field. As with secretaries and stenographers, the vast majority of typists and clerk typists in the province are female. The proportion of young people in this occupation declined from 47 percent in 1981 to 24 percent in 1986, perhaps reflecting fewer job opportunities over this period compared to previous years. The small percentage of typists and clerk typists who are older workers suggests that many move on to other occupations or opt for early retirement. These occupations are well represented in all areas of the province.

Job Prospects

Employment in these occupations declined by over 10 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Employment levels are expected to expand over the next five years but at a slower rate than than average for all occupations. This view is consistent with the outlook for public administration, hospitals, education and business services and the finance sector, where most typists and clerk typists are employed. A significant number of replacement openings are expected over this period as people leave this occupational area for various reasons.

In general, typists and clerk typists enjoy stable year-round employment. Some positions, particularly in the private sector, may be sensitive to fluctuations in economic activity. With so many typists and clerk typists employed either directly or indirectly by government, job opportunities may be curtailed during periods of government spending restraint. The increasing use of work processing technology by non-clerical personnel may also hinder job growth in this occupational area. Opportunities will be greatest for those clerical personnel who stay abreast of new technological developments in the field. The number of U.I. beneficiaries relative to employment in the occupation is below the average for all occupations in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 10,437 or less
Average Worker	$ 15,579
Highest 10% of Workers	$ 20,771 or more

Source: 1986 Census

Bookkeepers and Accounting Clerks 4131

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	6,208	2.3	2.9	1,976
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	2,745	225
Grand Falls	420	66
Stephenville	275	40
Corner Brook	675	128
Labrador	220	19
Harbour Grace	280	61
Clarenville	190	47
Marystown	180	38
Gander	445	59

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	30	70	35	60	5	83	17
	1986	25	75	22	73	5	84	16
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (29)	Services (20)	Public Administration (18)
- Retail (19)	- Business (6)	- Federal (7)
- Wholesale (10)	- Accommodation & Food (3)	- Provincial (7)
	- Health & Welfare, Non-Hospital (3)	- Local (4)

Bookkeepers and Accounting Clerks 4131

Job Environment

This category includes accounting, audit, bookkeeping and payroll clerks. Bookkeepers are primarily responsible for keeping statistical and financial records, maintaining and verifying systematic records and preparing financial statements. Virtually all bookkeepers use calculating, cheque-writing and bookkeeping machines in performing their duties. Accounting clerks prepare account statements, budget documents and related material, and process, verify and balance financial records using a manual or computerized system.

The use of electronic data-processing equipment has led to the creation of specialized fields within this occupation, including the areas of accounts payable, accounts receivable, payroll, inventory and cost information. The enlarged capacity of data processors to maintain records his increased productivity in this area but may weaken the demand for clerical staff.

Training and Qualifications

These occupations require graduation from high school and the completion of a community college program in accounting or bookkeeping. Programs of nine or ten months duration in clerk accounting and/or bookkeeping are available at several institutes and community colleges around the province. Similar programs are also offered by some private colleges in the province.

Nature of Supply

Approximately 70 percent of bookkeepers and accounting clerks in the province have some type of post-secondary education, in most cases a community college diploma in clerk accounting.

In 1986, three out of four accounting clerks were women, a slight increase compared to 1981. The proportion of young people in the occupation at that time was equal to the labour force average but was down considerably from 1981. This may indicate a tightening of the labour market over this period compared to early years. The percentage of older workers in the occupation was slightly lower than the overall average. Bookkeepers and accounting clerks are employed in significant numbers in all areas of the province.

Job Prospects

Employment in this occupation increased by almost 10 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been above average. Employment levels are projected to increase at a slightly faster pace than the average for all occupations over the next five years. This view is based on the outlook for a broad range of industries which employ accounting clerks, most notably retail and wholesale trade, services, and public administration. About half the job vacancies that arise over this period are expected to be replacement openings that come about as a result of retirements or for other reasons.

In general, this occupation offers stable year-round employment and is only mildly sensitive to fluctuations in economic conditions. However, job opportunities may be curtailed during economic downturns. The number of U.I. beneficiaries relative to employment in this occupation is well below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 10,635 or less
Average Worker	$ 17,365
Highest 10% of Workers	$ 25,793 or more

Source: 1986 Census

Cashiers and Tellers

4133

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	5,839	3.8	2.6	1,56[illegible]
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	2,120	501
Grand Falls	455	183
Stephenville	205	59
Corner Brook	500	201
Labrador	195	72
Harbour Grace	225	132
Clarenville	265	97
Marystown	145	63
Gander	515	188

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	4	96	50	48	2	59	41
	1986	5	95	46	52	2	48	52
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (69)
- Retail (66)
- Wholesale (3)

Finance, Insurance and Real Estate (15)

Services (14)
- Accommodation & Food (11)
- Recreation (2)

Cashiers and Tellers

4133

Job Environment

This occupational group comprises bank tellers, disbursement clerks, clerical cashiers and grocery checkers. Bank tellers process customers' financial transactions, such as deposits, withdrawals and transfers of funds. Cashiers process sales transactions and receive payment for goods and services. With the introduction of computers into the workplace, the recording of transactions is now mainly performed electronically.

Training and Qualifications

These occupations usually require high school graduation followed by a period of on-the-job training. Some private colleges in the province offer courses in bank telling lasting from four to six months.

Nature of Supply

Most people in these occupations have no post-secondary education and have entered the workforce directly from high school. Many are young women. In 1986 women accounted for 95 percent of employment in this occupation. Young people accounted for 46 percent of employment, more than twice the average for all occupations. In many cases these are entry level positions which lead to other opportunities after a period of time. Cashiers and tellers are employed in all areas of the province.

Job Prospects

Employment in these occupations increased by over 20 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. Projections call for slower growth over the next five years, but these occupations should still expand at a slightly faster pace than the overall average. The view is based on the outlook for the industries which employ cashiers and tellers, particularly the retail trade and finance sectors. The job vacancies that are expected over this period should be evenly split between new positions and replacement openings that arise when someone retires or leaves a position for other reasons.

For the most part, cashiers and tellers enjoy stable year-round employment and are not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in these occupations is somewhat higher than the provincial labour market average. Tellers account for just over 10 percent of the U.I. beneficiaries in this occupational group. Part-time work is quite common in these occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 6,503 or less
Average Worker	$ 11,317
Highest 10% of Workers	$ 16,960 or more

Source: 1986 Census

Electronic Data-Processing Equipment Operators 4143

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,010	6.2	2.8	253
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	750	193
Grand Falls	10	10
Stephenville	5	4
Corner Brook	45	13
Labrador	15	3
Harbour Grace	20	12
Clarenville	5	5
Marystown	0	2
Gander	55	9

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	21	79	49	51	0	91	9
	1986	18	82	29	68	3	88	12
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (26)
- Federal (14)
- Provincial (11)
- Local (1)

Services (24)
- Business (11)
- Education (7)
- Hospitals (3)

Trade (16)
- Wholesale (11)
- Retail (5)

Electronic Data-Processing Equipment Operators 4143

Job Environment

People who operate electronic or electro-mechanical machines to record, store, process and transcribe data to and from punch cards, paper tape, magnetic tape or other sources are part of this category. Computer operators, data processors and key-punch operators are some of the occupations in this area. Computer operators execute instructions prepared by programmers, schedule programs entered through remote terminals, monitor peripheral machines and keep records of operating times. When a problem is encountered, they take corrective measures or report the malfunction to the appropriate maintenance people. Workers must contend with a variety of electronic machinery and may be exposed to machine-related noise. Shift work and overtime are occasionally required.

Training and Qualifications

Persons wishing to work in these occupations should graduate from high school. Typing skills and a course in data processing would be a definite asset. The Cabot Institute offers a ten-month program in computer applications-operations. The Fisher Institute offers a two-year program in information processing.

Nature of Supply

About two-thirds of the people employed in this occupational area have some type of post-secondary education, usually a community college program in the clerical field. Women accounted for over 80 percent of employment in this occupation in 1986. The percentage of young people in the group declined significantly between 1981 and 1986 but was still higher than the average for all occupations. Roughly four out of five EDP operators in the province were employed in the St. John's area.

Job Prospects

Employment in this occupation increased by almost 50 percent between 1981 and 1986 and growth for the 1980s as a whole is estimated to have been well above average. Employment prospects are expected to slow over the next five years but the occupation should still expand at a slightly faster rate than the average for all occupations. This view is based on the outlook for public administration, business, education and hospital services and wholesale and retail trade, where most EDP operators are employed. Replacement openings will account for a significant portion of the job vacancies expected over this period.

This occupation offers stable year-round employment and is not affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in this occupation is slightly higher than the average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 11,522 or less
Average Worker	$ 17,328
Highest 10% of Workers	$ 24,771 or more

Source: 1986 Census

Shipping and Receiving Clerks 4153

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	499	-2.7	2.0	93
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	295	30
Grand Falls	40	11
Stephenville	15	9
Corner Brook	40	12
Labrador	25	1
Harbour Grace	5	5
Clarenville	15	7
Marystown	15	1
Gander	15	13

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	92	8	36	55	9	89	11
	1986	89	11	30	68	2	86	14
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (61)
- Wholesale (33)
- Retail (28)

Manufacturing (17)
- Food and Beverage (10)
- Printing & Publishing (2)
- Wood (2)

Transport, Communications & Utilities (12)
- Water Transport (3)
- Storage (3)
- Postal and Courier (2)

Shipping and Receiving Clerks

4153

Job Environment

Occupations in this group include shippers, stock clerks, delivery and freight clerks, and warehouse receivers. A shipping clerk's main responsibilities are to co-ordinate the shipment of goods to customers and to keep up-to-date inventory records. Other duties include assembling, packing, addressing and loading goods for delivery, and preparing bills of lading, invoices and requisitions. This work is performed indoors and involves considerable physical activity such as lifting, carrying and reaching. Receiving clerks perform the reverse of these functions: they receive, unpack, inspect, sort, store and record incoming goods. In many instances, these responsibilities are combined in a single job.

Training and Qualifications

These occupations usually require some high school education followed by a period of on-the-job training. Many people in this field start out as warehouse workers and become shippers after demonstrating competence, an ability to handle paperwork and attention to detail. The Corona Training Institute in White Bay offers a six-month program in shipping and receiving.

Nature of Supply

Approximately 75 percent of shipping and receiving clerks have no post-secondary training and entered the workforce straight from high school. Men predominate in this occupation with women accounting for just 11 percent of employment in this occupation in 1986. At 30 percent, the proportion of young people in the occupation is higher than the provincial labour market average. Over half the people employed in this occupational area reside in the St. John's area.

Job Prospects

Employment in this occupational area declined by over 25 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Employment levels are expected to expand at about the average rate for all occupations over the next five years. This view is based on the outlook for wholesale and retail trade, manufacturing and the transportation sector, where most shipping and receiving clerks are employed. Relatively few replacement openings are expected over this period given the young average age of those employed in the occupation.

This occupation offers stable year-round employment and is mildly sensitive to fluctuations in economic activity. Some positions may be lost during economic downturns. The number of U.I. beneficiaries relative to employment in this occupation is equal to the overall average in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 11,220 or less
Average Worker	$ 18,026
Highest 10% of Workers	$ 26,809 or more

Source: 1986 Census

Stock Clerks and Related Occupations 4155

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,434	0.7	2.7	342
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	630	31
Grand Falls	85	1
Stephenville	65	17
Corner Brook	115	12
Labrador	80	7
Harbour Grace	65	3
Clarenville	45	4
Marystown	80	7
Gander	75	3

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	78	22	46	47	7	81	19
	1986	79	21	39	57	4	77	23
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (49)	Services (13)	Public Administration (12)
- Retail (35)	- Hospitals (6)	- Federal (7)
- Wholesale (14)	- Education (5)	- Provincial (3)
	- Accommodation & Food (2)	- Local (1)

Stock Clerk and Related Occupations

4155

Job Environment

Central supply clerk, inventory clerk, material keeper, purchasing clerk, and stockroom attendant are occupations representative of this classification. Stock clerks are the contact point between the customer department and the supplying department. They are responsible for receiving, storing and distributing supplies, and monitoring and replenishing inventory, as required. They must therefore have an orderly and systematic approach to locating items. Stock clerks also prepare the necessary paperwork to maintain an inventory. Depending on the employer and the type of stock, clerks may have to work in cold, drafty warehouses and handle large, heavy items.

Training and Qualifications

These occupations usually require some high school education followed by a period of on-the-job training. Employers look for people with good mathematical skills, the ability to perform accurate calculations and a capacity for detailed work.

Nature of Supply

About 60 percent of people in this occupation have no post-secondary education. Those that do cover a wide range of subject areas. The occupation continues to be male-dominated. Women accounted for just over 20 percent of employment in 1986, virtually unchanged from 1981. The percentage of young people in the occupation is almost double the all-occupation average, suggesting that for many, these are entry level positions. At 4 percent, the proportion of older workers in the occupation is half the overall average. Stock clerks are employed in all areas of the province.

Job Prospects

Employment in this occupation declined by over 5 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been below average. Job prospects are expected to be slightly above average over the next five years based on the outlook for retail and wholesale trade, services and public administration where most stock clerks are employed. A significant number of replacement openings are also expected over this period.

Most stock clerks are employed on a year-round basis. The occupation is somewhat sensitive to fluctuations in economic activity, particularly in the trade sector. Job opportunities may be curtailed during periods of economic recession. Computerized cash registers that automatically trace inventory levels have tended to hinder employment growth in this area. The number of U.I. beneficiaries relative to employment in the occupation is well below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 9,863 or less
Average Worker	$ 18,241
Highest 10% of Workers	$ 27,903 or more

Source: 1986 Census

Receptionists and Information Clerks 4171

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,111	3.1	2.8	384
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	580	130
Grand Falls	30	21
Stephenville	50	12
Corner Brook	145	28
Labrador	30	13
Harbour Grace	25	19
Clarenville	25	13
Marystown	15	8
Gander	60	22

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	2	98	35	57	8	77	23
	1986	5	95	27	64	9	75	25
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (62)	Public Administration (11)	Transport, Communications & Utilities (8)
- Health & Welfare, Non-Hospital (25)	- Federal (7)	- Air Transport (2)
- Hospitals (22)	- Provincial (3)	- Telecommunications (2)
	- Local (1)	- Truck Transport (1)

Receptionists and Information Clerks

4171

Job Environment

Receptionists greet people coming into offices, hospitals and other establishments, ascertain the nature of the visit or the required service and direct the client to the appropriate place. They may also perform clerical duties such as scheduling and confirming appointments, answering correspondence, operating the telephone system, typing, filing and distributing mail. This occupational group includes admitting, appointment and telephone clerks. Admitting clerks record information on admittance forms and route them to appropriate departments. Receptionists often work alone in a reception area, although in small businesses and in some accommodation establishments they may be located at the front of the general office area.

Training and Qualifications

There is no set requirement for receptionists although high school graduation is preferred by many employers. Typing and work processing skills would also be an asset. Various community colleges around the province offer a nine-month program for receptionist typist. Similar programs are also available at some of the private colleges in the province.

Nature of Supply

About 60 percent of those employed in these occupations have some type of post-secondary education; many with a community college diploma in the clerical field. The occupation is overwhelmingly female with men accounting for just 5 percent of employment in 1986. The proportion of young people in this occupational area is slightly higher than average. The percentage of older workers is equal to the overall average. Receptionists and information clerks are employed in all areas of the province.

Job Prospects

Employment in these occupations increased by over 12 percent between 1981 and 1986 and growth for the decade is estimated to have been above average. Job prospects are projected to be slightly better than average over the next five years. The view is based on the outlook for a broad range of industries which employ receptionists, most notably the health sector and public administration. Replacement openings that become vacant due to retirement or for other reasons should slightly exceed the number of new jobs created in this occupational area over the next five years.

Receptionists enjoy stable year-round employment and are not particularly affected by fluctuations in economic conditions. The number of U.I. beneficiaries relative to employment in this occupation is slightly higher than the average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 9,473 or less
Average Worker	$ 14,846
Highest 10% of Workers	$ 21,287 or more

Source: 1986 Census

Claims Adjusters 4192

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	135	-4.8	0.6	24
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	75	3
Grand Falls	20	0
Stephenville	0	0
Corner Brook	5	0
Labrador	0	0
Harbour Grace	0	0
Clarenville	5	0
Marystown	5	0
Gander	20	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	44	56	33	67	0	94	6
	1986	39	61	4	82	14	94	6
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (31)	Public Administration (31)	Trade (19)
- Radio & TV Broadcasting (8) - Electric Power (8) - Air Transport (4)	- Federal (27) - Provincial (4)	- Retail (19)

Claims Adjusters

4192

Job Environment

Adjusters, compensation agents, complaint adjusters and repair clerks are included in this classification. Claims adjusters investigate and adjust claims for loss or damages filed by clients. They determine the company's liability and recommend a proper course of action. Although adjusters may issue cheques to be drawn against company funds, most submit their findings to claims examiners who review the submitted reports, check precedents or similar cases and then authorize payment. The investigative aspect of the job sometimes involves evening and weekend work.

Training and Qualifications

These occupations usually require high school graduation combined with a period of on-the-job training. Insurance claims adjusters should complete a program of self-study sponsored by the Insurance Institute of Canada. A community college program in business would be an asset. The Cabot Institute offers a two-year program in business administration.

Nature of Supply

Over 70 percent of claims adjusters in the province have some type of post-secondary education, many in the area of business administration. Women accounted for a slight majority of employment in this occupation at 61 percent. The percentage of young people in the occupation declined dramatically between 1981 and 1986 due primarily to a lack of job opportunities over this period. The proportion of older workers in the occupation is considerably higher than average, indicating that a considerable number of claims adjusters are approaching retirement age. Just over half the claims adjusters in the province reside in the St. John's area.

Job Prospects

Employment in this occupation declined by just over 20 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been negative. Employment is expected to expand over the next five years but at a slower rate than the average for all occupations. This view is based on the outlook for communications and utilities, public administration, retail trade and the insurance sector where most claims adjusters are employed. The higher than average proportion of older workers should result in a significant number of replacement openings over this period however.

Claims adjusters enjoy stable year-round employment and are not affected by fluctuations in economic activity. This is reflected in the very low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 12,388 or less
Average Worker	$ 23,005
Highest 10% of Workers	$ 35,713 or more

Source: 1986 Census

Travel Clerks, Ticket, Station and Freight Agents 4193

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	452	3.8	2.7	114
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	170	11
Grand Falls	30	3
Stephenville	30	2
Corner Brook	25	3
Labrador	65	0
Harbour Grace	5	0
Clarenville	0	1
Marystown	5	1
Gander	65	6

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	46	54	36	64	0	93	7
	1986	51	49	26	69	5	84	16
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (67)
- Air Transport (53)
- Water Transport (9)
- Miscellaneous (3)

Services (30)
- Miscellaneous (29)
- Recreation (1)

Public Administration (3)
- Provincial (3)

Travel Clerks, Ticket, Station and Freight Agents

4193

Job Environment

Travel agents work in retail travel agencies and transportation and tourism firms, providing travel information, planning itineraries and arranging accommodation for travellers. They make reservations and sell tickets to passengers for air, motor, rail or water transportation. Ticket agents also check baggage, calculate freight and express-package charges, attend boarding gates and handle telephone requests from customers. Ticket agents usually work on rotating shifts. Some overtime work during evenings, weekends, and poor weather conditions may be required. During peak travel periods they work under tremendous pressure.

Training and Qualifications

High school graduation is the minimum requirement for these occupations. Employment prospects are greatly enhanced with the completion of a travel and tourism program. The Western Community College offers a two-year travel counsellor program. Some private colleges in the province also offer programs in travel and tourism.

Nature of Supply

Over half the people in these occupation have some form of post-secondary education. Employment is split evenly between men and women. The proportion of young people in the occupation was slightly higher than average in 1986 but down significantly from 1981. The percentage of older workers in these occupations increased over this period but remained below average. Travel clerks and agents are employed in most areas of the province.

Job Prospects

Employment in these occupations increased by over 25 percent between 1981 and 1986 and growth for the decade is estimated to have been higher than average. Job prospects are expected to slow over the next five years but should still expand at a slightly faster than average pace. This view is based on the outlook for the transportation and miscellaneous services sectors where these occupations are concentrated. A significant number of replacement openings are also expected over this period.

For the most part, these occupations offer stable year-round employment however some positions may be sensitive to fluctuations in economic activity. Job opportunities may be curtailed during periods of economic recession. The number of U.I. beneficiaries relative to employment in these occupations is well below the average for all occupations. Travel agents account for the majority of beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 12,952 or less
Average Worker	$ 26,214
Highest 10% of Workers	$ 37,022 or more

Source: 1986 Census

General Office Clerks

4197

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,411	0.5	2.0	597
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	1,155	978
Grand Falls	125	207
Stephenville	95	125
Corner Brook	290	210
Labrador	80	66
Harbour Grace	135	129
Clarenville	100	74
Marystown	75	66
Gander	150	158

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	27	73	31	64	5	85	15
	1986	23	77	22	74	4	80	20
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (28)
- Federal (15)
- Provincial (10)
- Local (3)

Trade (22)
- Retail (13)
- Wholesale (9)

Services (21)
- Hospitals (9)
- Education (3)
- Miscellaneous (3)

General Office Clerks 4197

Job Environment

Administrative clerk, forms control clerk, process clerk and hospital clerk are typical occupations in this group. Office clerks perform duties that range from running errands, delivering messages, receiving and forwarding telephone or counter enquiries, handling mail and filing correspondence, to acting as special assistants in particular departments. In smaller offices, the nature of the work is varied, while in larger offices it tends to be more specialized and repetitive. Most of the work is done at a desk or counter.

Training and Qualifications

These occupations usually require high school graduation followed by a period of on-the-job training. Typing would be an asset.

Nature of Supply

Just over half the people in this occupation have some form of post-secondary education covering a broad range of subject areas. The occupation is dominated by women. They accounted for about three out of four jobs in this occupational area in 1986. The proportion of young people is equal to the labour market average. The proportion of older workers in the occupation is half the overall average. General office clerks are employed in all areas of the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986 and growth for the decade is estimated to have been below average. Employment levels should increase at about the average rate for all occupations over the next five years. This view is based on the outlook for a broad range of industries which employ office clerks, most notably public administration, retail and wholesale trade and components of the service sector. Of the total number of job vacancies expected over this period over half are expected to be replacement openings that come about as a result of retirement or for other reasons.

Office clerks are usually employed on a year-round basis and are not significantly affected by fluctuations in economic activity. Clerks in the private sector could be negatively affected during periods of economic recession. Job opportunities in the public sector may be curtailed during periods of government spending restraint. The number of U.I. beneficiaries relative to employment in the occupation is well in excess of the provincial labour market average. This is a reflection of the generally unfavourable labour market conditions facing office clerks in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 9,311 or less
Average Worker	$ 17,227
Highest 10% of Workers	$ 25,416 or more

Source: 1986 Census

Technical Salespersons 5131

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	67	-2.1	2.6	14
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	45	13
Grand Falls	0	0
Stephenville	0	0
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	1
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	35	65	0	100	0
	1986	73	27	18	73	9	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (46)	Manufacturing (27)	Services (27)
- Wholesale (46)	- Electrical & Electronic Products (18) - Miscellaneous (9)	- Business (27)

Technical Salespersons

5131

Job Environment

This category includes data-processing and electronic equipment sales representatives, technical and implement salespersons, and sales engineers. They deal with a broad range of scientific and technical products and are considered among the elite of the sales occupations. They may also be involved in redesigning the equipment they are selling according to customers' specifications.

Training and Qualifications

While qualifications vary, employment in this occupation usually requires the completion of a community college or institute of technology program in a field of study related to the product or service being sold. In some cases a university degree is desirable. Some employers may provide training programs lasting up to six months.

Nature of Supply

Just over half the people in this occupation have some form of post-secondary education usually in business administration or engineering technologies. In 1986, roughly one in four technical salespersons in the province was female, a considerable increase compared to 1981. The proportion of young people in this occupational area was slightly below average. At the time of the 1986 Census, all technical salespersons in the province resided in the St. John's area.

Job Prospects

Employment in this occupation declined by over 40 percent between 1981 and 1986 and growth for the decade is estimated to have been negative. Prospects should improve somewhat over the next five years. Employment to 1995 is expected to expand at a slightly faster than average rate based on the outlook for wholesale trade, manufacturing and business services where most technical salespersons are employed. Some replacement openings are also expected over this period as those currently in these positions retire or move on to other occupations.

This occupation offers stable year-round employment. However, the occupation is somewhat sensitive to fluctuations in business conditions and some positions could be lost during periods of economic recession. The number of U.I. beneficiaries relative to employment in the occupation is roughly equal to the labour force average. Beneficiary levels in these occupation have been declining recently. Technical salespersons in the computer field account for a majority of the beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 31,891
Highest 10% of Workers	N/A

Source: 1986 Census

Commercial Travellers 5133

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	607	-4.1	0.9	86
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	410	27
Grand Falls	15	11
Stephenville	5	1
Corner Brook	115	10
Labrador	0	0
Harbour Grace	35	5
Clarenville	20	0
Marystown	5	1
Gander	30	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	96	4	11	81	8	96	4
	1986	93	7	9	82	9	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (57)
- Wholesale (57)

Manufacturing (37)
- Food and Beverage (25)
- Chemical Products (4)
- Petroleum Products (2)

Services (3)
- Recreation (2)
- Business (1)

Commercial Travellers

5133

Job Environment

Commercial travellers vary from commercial agents and drug representatives to footwear, fuel and furniture salespersons. These occupations are concerned with selling commodities on a wholesale basis in an allotted geographical area to wholesale, retail, industrial, professional and other establishments. The salesperson's job is to service existing clients and to secure further customers. Commercial travellers also quote prices, arrange deliveries, resolve customer complaints and keep abreast of the latest product innovations. Their job requires them to travel and often work evenings and weekends.

Training and Qualifications

These positions usually require high school graduation. A community college or university program in business or marketing would be a definite asset. Some form of on-the-job training is normally provided.

Nature of Supply

Just over 30 percent of people employed in this occupational area have some form of post-secondary education, usually in business administration or engineering technologies. The occupation is predominately male with women accounting for just 7 percent of employment in 1986. The small percentage of young people reflects a desire on the part of employers for employees with proven sales experience. The proportion of older workers in the occupation is equal to the labour force average. Approximately two-thirds of commercial travellers in the province reside in the St. John's area.

Job Prospects

Employment in this occupation declined by over 30 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Employment is expected to expand over the next five years but at a reduced rate compared to the average for all occupations. This view is based on the outlook for wholesale trade and various components of the manufacturing industry where most commercial travellers are employed. While the number of new jobs will be limited, a significant number of replacement openings are expected over this period given the number of people in the occupation approaching retirement age.

Generally speaking, commercial travellers enjoy stable year-round employment. The occupation is somewhat sensitive to fluctuations in business conditions and some positions could be lost during periods of economic recession. The number of U.I. beneficiaries relative to employment in the occupation is about half the labour force average.

1985 Annual Earnings

Lowest 10% of Workers	$ 17,718 or less
Average Worker	$ 28,325
Highest 10% of Workers	$ 40,732 or more

Source: 1986 Census

Sales Clerks and Salespersons, Commodities 5135

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	10,311	0.3	1.3	1,070
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	3,745	491
Grand Falls	695	224
Stephenville	490	165
Corner Brook	1,280	310
Labrador	350	81
Harbour Grace	590	186
Clarenville	370	157
Marystown	315	85
Gander	680	179

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	39	61	38	56	6	70	30
	1986	42	58	32	62	6	64	36
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (92)	Services (4)	Manufacturing (3)
- Retail (77)	- Accommodation & Food (1)	- Food and Beverage (1)
- Wholesale (15)	- Miscellaneous (1)	

Sales Clerks and Salespersons, Commodities

5135

Job Environment
This occupational group includes salespersons for a limitless variety of goods. In selling commodities, sales clerks provide direct service to customers and must be knowledgeable about the products they sell. Duties include keeping records of items sold, writing out sales receipts, tallying sales, dealing with complaints and refunds and operating cash registers. Many of the traditional functions, however, are now done electronically by multi-function cash registers. In many cases, this has freed sales clerks to perform a number of other tasks, such as inventory searches and completion of restocking orders. In keeping with customer shopping patterns, sales clerks usually work some evenings and Saturdays. Salespersons work almost exclusively indoors and on their feet.

Training and Qualifications
There are no rigid requirements for this occupational area. Personal suitability and neat appearance are two important qualities considered by employers.

Nature of Supply
Most people in this occupational area have no formal post-secondary education and enter the labour force directly after high school. In 1986, women accounted for a slight majority in this occupation at 58 percent. The fact that young people accounted for a higher than average proportion of employment is not surprising given the entry level nature of many of these positions. The percentage of older workers in the occupation is slightly lower than average. Sales clerks are employed in all areas of the province.

Job Prospects
Employment in this occupation declined by over 5 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well below average. Job prospects should improve over the next five years but the rate of expansion is still expected to be below average. This view is based on the outlook for those industries which employ sales clerks, particularly retail and wholesale trade. A number of replacement openings are also expected over this period.

Many jobs in this occupational area are year-round although employment levels do tend to rise for the Christmas shopping season. The occupation is somewhat sensitive to fluctuations in business conditions and the number of positions or hours of work may be reduced during periods of economic recession. The number of U.I. beneficiaries relative to employment in the occupation is slightly lower than the labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 7,561 or less
Average Worker	$ 16,894
Highest 10% of Workers	$ 30,658 or more

Source: 1986 Census

Insurance Sales Occupations 5171

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	560	3.1	2.2	191
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	300	3
Grand Falls	35	1
Stephenville	30	0
Corner Brook	45	0
Labrador	5	0
Harbour Grace	15	1
Clarenville	25	1
Marystown	15	1
Gander	25	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	83	17	19	67	14	93	7
	1986	71	29	10	80	10	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Finance, Insurance and Real Estate (100)

Insurance Sales Occupations

5171

Job Environment

Insurance agents and brokers, annuity representatives, claim inspectors, insurance appraisers and policy writers fall into this category. An insurance salesperson's main function is to sell suitable insurance policies to their clients. Other duties include explaining policy particulars, calculating premiums, drafting contracts and approving insurance applicants. Insurance agents' hours of work are largely self-determined, but the nature of the work often requires working evenings and weekends.

Training and Qualifications

These occupations usually require high school graduation. A post-secondary program in business would be a definite asset. New employees take part in a company-sponsored training program in conjunction with the Insurance Institute of Canada.

Nature of Supply

Approximately 60 percent of insurance salespersons have some type of post-secondary education, the most common area of study being business administration. While the occupation continues to be male-dominated, the number of women in the area has been increasing. Women accounted for almost 30 percent of employment in this occupation in 1986 compared to just 17 percent in 1981. The lower than average percentage of young people in the occupation is not surprising given the nature of insurance sales. While the majority of insurance salespersons live in the St. John's area, the occupation is represented in all areas of the province.

Job Prospects

Employment in this occupation increased by over 30 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been well above average. Growth prospects are expected to slow somewhat over the next five years but employment expansion should still be about average. This view is based on the outlook for the insurance industry where this occupation is concentrated. A significant number of replacement openings are expected over this period given the number of insurance salespersons approaching retirement age.

This occupation offers stable year-round employment and is not particularly sensitive to fluctuations in economic conditions.

1985 Annual Earnings

Lowest 10% of Workers	$ 15,560 or less
Average Worker	$ 29,004
Highest 10% of Workers	$ 49,339 or more

Source: 1986 Census

Real Estate Sales Occupations 5172

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	464	1.5	2.2	160
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	320	8
Grand Falls	10	0
Stephenville	5	0
Corner Brook	45	2
Labrador	10	0
Harbour Grace	5	1
Clarenville	0	0
Marystown	0	0
Gander	20	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	54	46	11	78	11	79	21
	1986	64	36	4	85	11	92	8
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)
Finance, Insurance and Real Estate (100)

Real Estate Sales Occupations

5172

Job Environment

Land appraisers, real estate agents and rental agents are typical members of this classification. Real estate agents are involved in the buying, selling, leasing and appraising of land and buildings. Their main task is to match owners of properties with people who wish to rent or buy property. After gaining experience with mortgage conditions, financing and legal documents concerning real estate transactions, many of them become brokers (owners or part-owners of a firm). Agents spend much of their time away from the office showing properties to prospective buyers, soliciting property sales listings from prospective vendors and assisting clients in making offers of purchase. They must often work evenings and weekends, when a large number of sales (especially residential) are transacted. The introduction of computer technology and multiple listings in this field has enabled agents to broaden their customer base and meet customers' needs more quickly than before.

Training and Qualifications

There are no educational requirements to become a real estate salesperson but one must undertake a brief period of self study and pass an examination given periodically by the Newfoundland Real Estate Association. To become an appraiser one must write the Appraisal Institute of Canada certification examinations. The Cabot Institute offers a two-year program in appraisal assessment technology. Graduates of this program are eligible to write the certification examinations.

Nature of Supply

Over half the people in this occupation have some type of post-secondary education, the most common subject area being business administration. At 36 percent, the proportion of women in this occupational area is just slightly below the labour force average. The lack of young people in real estate sales is not surprising given the nature of the occupation. The percentage of older workers in this occupation is slightly higher than the overall average. Over three-quarters of these positions are located in the St. John's area.

Job Prospects

Employment in this occupational area increased by 15 percent between 1981 and 1986 and growth for the 1980s as a whole is estimated to have been about average. Job prospects are expected to improve over the next five years relative to the previous decade. Employment is projected to expand at the average rate for all occupations over this period. This view is based on the outlook for the real estate sector where this occupation is concentrated. A significant number of replacement openings are also expected given the number of older workers in the occupation approaching retirement age.

Employment in this occupation tends to vary with the real estate market which depends to some extent on interest rates, incomes and employment prospects generally. As such, some positions and/or earnings could be negatively affected during economic recessions. Conversely, employment prospects are brightest during periods of economic expansion.

1985 Annual Earnings

Lowest 10% of Workers	$ 9,050 or less
Average Worker	$ 29,604
Highest 10% of Workers	$ 58,106 or more

Source: 1986 Census

Sales Agents and Traders, Securities 5173

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	84	-0.8	2.5	21
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	40	1
Grand Falls	0	0
Stephenville	0	1
Corner Brook	10	0
Labrador	0	0
Harbour Grace	15	0
Clarenville	0	0
Marystown	0	0
Gander	10	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	82	18	0	100	0	94	6
	1986	60	40	6	71	23	88	12
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Finance, Insurance & Real Estate (93)

Services (7)
- Business (7)

Sales Agents and Traders, Securities

5173

Job Environment

Typical professionals in this occupational group are securities traders, bond traders, mutual fund sales agents, investment dealers and trust representatives. They buy and sell securities, stocks and bonds, and buy into mutual funds on behalf of customers, maintaining files on customer portfolios. They also furnish clients with information on stock and bond market conditions and on corporations in which investment is contemplated.

Training and Qualifications

These occupations require high school graduation. A university degree in business or economics would be a definite asset. Entrants to this field must complete the three- to six-month Canadian Securities Course and be bondable.

Nature of Supply

Over half the people in this occupational area have some type of post-secondary education spanning a wide range of subject areas. At the time of the 1986 Census women accounted for 40 percent of employment compared to just 18 percent five years earlier. The proportion of young people in the occupation was well below average while the percentage of older workers was considerably higher than average. This in not surprising since a wide range of contacts who are financially secure is an important prerequisite for this position. Most securities sales agents reside in the St. John's area.

Job Prospects

Employment in this occupational group declined slightly in the early 1980s and growth for the decade as a whole is estimated to have been negative. Employment is expected to expand at about the average rate for all occupations over the next five years. In addition, a significant number of replacement openings are expected over this period given the large percentage of securities sales agents approaching retirement age.

Job prospects in this occupational area tend to vary with economic activity generally and with financial markets in particular. Established dealers and agents experience fluctuations in income rather than employment but less established personnel may move on to other occupations during periods of economic contraction. Financial deregulation could lead to increased competition among the various financial institutions and result in stronger employment growth than projected here. Employment in this occupational area is not affected by seasonal factors.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 24,490
Highest 10% of Workers	N/A

Source: 1986 Census

Advertising Salespersons 5174

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	191	3.3	3.0	84
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	75	5
Grand Falls	0	0
Stephenville	5	0
Corner Brook	35	0
Labrador	0	0
Harbour Grace	5	0
Clarenville	5	0
Marystown	0	1
Gander	0	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	62	38	0	100	0	85	15
	1986	60	40	13	84	3	78	22
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (40)
- Printing & Publishing (40)

Transport, Communications & Utilities (36)
- Radio & TV Broadcasting (28)
- Telecommunications (4)
- Postal and Courier (4)

Services (16)
- Business (16)

Advertising Salespersons

5174

Job Environment

Occupations in this group include advertising agent, sales representative, advertising broker and time salesperson. This work involves visiting businesses and advertising firms to sell advertising space or commercial air time on behalf of television, radio, publishing and other media companies.

Training and Qualifications

These occupations usually require high school graduation with some experience in the sales field. A community college or university program in business, marketing or economics would be a definite asset. Good interpersonal skills are also required.

Nature of Supply

Many people in this field have no formal post-secondary education. Those that do tend to have a background in business administration or commerce. Women accounted for 40 percent of employment in this occupation in 1986. The percentage of young people as well as the percentage of older workers employed as advertising salespersons is below average. This suggests that significant sales experience is required before entering advertising sales and that many of these sales people move on to other occupations later in their careers. Most advertising salespersons in the province reside in the St. John's area.

Job Prospects

Employment in this occupation increased by almost 15 percent in the early 1980s and growth for the decade as a whole is estimated to have been well above average. Employment is expected to expand at a slightly faster than average pace over the next five years based on the outlook for printing and publishing, the communications sector and business services, where most advertising sales people are employed. A significant number of replacement openings are also expected over this period.

This occupation offers stable year-round employment and is not particularly sensitive to fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in the occupation is well below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 32,028
Highest 10% of Workers	N/A

Source: 1986 Census

Fire Fighting Occupations 6111

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	760	3.4	0.1	103
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	295	3
Grand Falls	65	0
Stephenville	30	0
Corner Brook	100	1
Labrador	110	0
Harbour Grace	10	1
Clarenville	20	0
Marystown	0	0
Gander	65	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	99	1	9	81	10	98	2
	1986	100	0	12	83	5	98	2
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (66)
- Provincial (28)
- Local (26)
- Federal (12)

Forestry (14)

Transport, Communications & Utilities (14)
- Air Transport (13)
- Electric Power (1)

Fire Fighting Occupations 6111

Job Environment

This occupational group is concerned with fighting fires and protecting lives and property against fire. When not extinguishing fires, fire-fighters maintain equipment, respond to other emergency calls, and sometimes administer paramedical aid. The work in this occupation is dangerous and physically demanding, often involving exposure to smoke and hazardous gases.

Training and Qualifications

Applicants interested in becoming a member of the St. John's Fire Department must be a Canadian citizen, be at least 19 years of age, be mentally and physically fit, and be a high school graduate. Applicants must pass a written examination, a physical assessment, a medical assessment and a personal interview. Successful candidates receive six weeks training upon acceptance. Requirements in other municipalities may vary.

Nature of Supply

Most fire-fighters in the province have no formal post-secondary education. The most common area of study for those that do is engineering technologies and trades. At the time of the 1986 Census, all of the province's fire-fighters were male. A smaller than average proportion were young people. The percentage of older workers in the occupation was also below average reflecting the fact that fire-fighters tend to retire earlier than people in other occupations.

Job Prospects

Employment in this occupation increased by 20 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. Employment levels are expected to show little change over the next five years. This view is based on the outlook for the various levels of government, the forestry sector and the air transport sector, where the majority of fire-fighters are employed. In fact, the vast majority of job opportunities expected over this period will be replacement openings that arise as those currently in the positions retire.

Fire-fighters enjoy stable year-round employment and are not affected by fluctuations in economic activity. However, since many fire-fighters are employed by government, the occupation is somewhat sensitive to government spending decisions. Job prospects may be curtailed during periods of government spending restraint. The stable nature of employment is reflected in the low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 22,202 or less
Average Worker	$ 30,219
Highest 10% of Workers	$ 39,740 or more

Source: 1986 Census

Police Officers and Detectives, Government 6112

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	975	2.3	0.1	55
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	485	5
Grand Falls	60	0
Stephenville	65	2
Corner Brook	180	0
Labrador	45	1
Harbour Grace	15	0
Clarenville	25	0
Marystown	35	0
Gander	90	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	98	2	18	82	0	98	2
	1986	98	2	16	83	1	98	2
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Public Administration (100)
- Federal (60)
- Provincial (31)
- Local (9)

Police Officers and Detectives

6112

Job Environment

This occupational group includes all law enforcement personnel in Canada, including provincial police constables and detectives and the Royal Canadian Mounted Police (RCMP). The police constable's responsibility is to protect life, maintain peace, enforce laws and provide assistance in any type of emergency. RCMP responsibilities, which vary according to the location, involve advanced ballistics, toxicology and criminology. The skill mix of police specialists is increasing, as technical advances continue to affect the methodology used in police work. With the exception of administrative officers, police constables work outdoors, often in dangerous situations. A position as police constable can lead to administrative and management jobs.

Training and Qualifications

To become a member of the Royal Newfoundland Constabulary one must be a Canadian citizen, graduate from high school, be at least 19 years of age, hold a valid driver's license, be physically and mentally fit, and meet the required vision standards. Successful applicants receive 40 weeks training at the Atlantic Police Academy in Prince Edward Island. After graduation a police recruit serves a probationary period of twelve months during which special supervision is given.

To become a member of the Royal Canadian Mounted Police, one must be a Canadian citizen, be of good character, be a high school graduate, possess a valid driver's license, and meet the physical, medical, and dental requirements of the force. Special consideration is given to candidates who speak both official languages, have completed post-secondary studies, or are either female, a native person, or a member of a visible minority. Successful applicants receive six months training at the RCMP Academy in Saskatchewan followed by six months of on-the-job training under the supervision of a senior member of the force. Unilingual recruits undergo language training through the Recruit Official Languages Training Program.

Nature of Supply

Approximately half the police officers in the province have some form of post-secondary education. The most common area of study for those that do is the social sciences, although other subject areas are also represented. At the time of the 1986 Census, women accounted for just two percent of employment in this occupation. This percentage will no doubt rise given increased efforts to recruit women in recent years. The number of young people in this occupation is relatively low compared to other occupations. Similarly, the proportion of older workers in this field is well below average, reflecting the fact that police officers tend to retire earlier than most other occupations. Police officers can be found in all regions of the province.

Job Prospects

Employment in this occupation increased by almost 30 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been above average. This situation is expected to change in the 1990s, as little in the way of employment growth is expected over the next five years. This view is consistent with the outlook for the various levels of government that employ police officers. A significant number of replacement openings are expected over this period, however, as a number of police officers opt for retirement.

This occupation offers stable year-round employment and is not affected by fluctuations in economic conditions. However, since police officers are employed by the various levels of government, job opportunities may be curtailed during periods of government restraint.

1985 Annual Earnings

Lowest 10% of Workers	$ 24,367 or less
Average Worker	$ 34,694
Highest 10% of Workers	$ 44,585 or more

Source: 1986 Census

Guards and Related Security Occupations 6115

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,063	3.2	2.3	716
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	990	62
Grand Falls	60	11
Stephenville	150	22
Corner Brook	115	27
Labrador	165	9
Harbour Grace	90	14
Clarenville	60	10
Marystown	45	11
Gander	105	9

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	89	11	21	56	23	85	15
	1986	87	13	22	62	16	79	21
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (51)
- Business (31)
- Health & Welfare, Non-Hospital (7)
- Education (5)

Public Administration (33)
- Provincial (21)
- Federal (10)
- Local (1)

Manufacturing (5)
- Food and Beverage (4)
- Pulp and Paper (1)

Guards and Related Security Occupations

6115

Job Environment

This occupational group includes correctional officers, plant guards and administrative officers. Correctional officers are responsible for maintaining security and attending to the daily welfare of inmates. They are trained to deal with dangerous situations, use tactical weapons and practice first aid and fire prevention. Guards and other related security occupations provide additional security to factories, warehouses and other establishments. Members of this occupational group often have to work at night.

Training and Qualifications

To become a security guard, one should possess some high school education and be at least 19 years of age. In most cases the employee must be bondable. The Avalon Community College offers a three-week course in security guard training designed to provide individuals with the basic skills required in this field. Graduates are licensed by the Provincial Department of Justice.

To become a correctional officer one must be a Canadian citizen, be at least 19 years of age, have graduated from high school, have a valid driver's license, be in good physical and mental condition, and meet the required vision standards. Successful applicants receive a minimum of nine weeks pre-employment training.

Nature of Supply

Approximately one-third of security guards and correctional officers in the province have some type of post-secondary education. At the time of the 1986 Census women accounted for just 13 percent of employment in this occupational area, a slight increase over 1981. While the proportion of young people in this field is equal to the overall average, the percentage of older workers is double the average for all occupations. Roughly half the people in these occupations reside in the St. John's area with the other half distributed around all areas of the province.

Job Prospects

Employment in these occupations increased by 8 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. Growth prospects are expected to slow over the next five years to approach the labour market average. This view is based on the outlook for business services, and the health, education, and government sectors where most people in these occupations are employed. In addition, a large number of replacement openings are expected over this period given the high percentage of older workers in this occupational area who are approaching retirement age. The number of replacement openings is expected to exceed the number of new positions by a two to one margin.

For the most part, security guards and correctional officers enjoy stable year-round employment and are not significantly affected by fluctuations in economic conditions. The number of U.I. beneficiaries relative to employment in these occupations compares favourable with many other occupations in the province. Most of these beneficiaries are security guards rather than correctional officers.

1985 Annual Earnings

Lowest 10% of Workers	$ 9,117 or less
Average Worker	$ 18,538
Highest 10% of Workers	$ 31,316 or more

Source: 1986 Census

Supervisors: Food and Beverage Preparation and Food Service Occupations

6120

Employment Trends	**Number of Jobs 1990**	**Average Annual Growth Rates (%) Estimated 1981 - 1990**	**Projected 1990 - 1995**	**Number of Job Openings 1990 - 1995**
This Occupation	882	-0.5	1.0	187
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	**1986 Employment**	**September, 1990 Regular U.I. Beneficiaries**
St. John's	280	47
Grand Falls	45	2
Stephenville	80	5
Corner Brook	115	4
Labrador	35	0
Harbour Grace	50	5
Clarenville	30	5
Marystown	5	1
Gander	50	3

Census - 1981 and 1986 (%)		**Men**	**Women**	**Age<25**	**Age 25-54**	**Age>54**	**Full-time**	**Part-time**
This Occupation	1981	51	49	14	77	9	87	13
	1986	42	58	13	70	17	84	16
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (90)	**Trade (5)**	**Transport, Communications & Utilities (4)**
- Accommodation & Food (74) - Health & Welfare, Non-Hospital (6) - Hospitals (4)	- Retail (5)	- Water Transport (4)

Supervisors: Food and Beverage Preparation and Food Service Occupations

6120

Job Environment

Supervisors in this classification include cafeteria supervisors, head chefs, head waiters/waitresses and maîtres d'hôtel. These managers supervise staff, coordinate service and oversee housekeeping, budgets and sales. Experienced managers rise rapidly to senior positions. Work in these occupations can be fast-paced, challenging and complex.

Training and Qualifications

Many people in these occupations have no formal education in their field but have sufficient on-the-job experience to move in to supervisory positions. However, more and more employers today are seeking employees with some formal training in this area. The Cabot Institute offers a two-year program in food administration. The Western Community College offers a two-year program in hotel and restaurant management. Courses ranging in duration from nine to ten months are also available in hospitality services, hotel/motel restaurant operations and hotel and restaurant services at various institutions around the province. Similar programs are also available at some private colleges in the province.

Nature of Supply

Over three-quarters of the people in this line of work have no formal post-secondary education and entered the workforce directly after leaving high school. At 58 percent, women accounted for a slight majority of the employment in this occupational area in 1986. As would be expected, given the supervisory nature of these positions, the proportion held by young people is below the overall average. On the other hand, the percentage of older workers in these occupations is double the average. These positions are located in all regions of the province.

Job Prospects

Employment in these occupations declined by almost 20 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Employment is expected to expand over the next five years but at a slower rate than the average for all occupations. This view is based on the outlook for accommodation and food services, health and welfare, and retail trade where most people in these occupations are employed. A large number of replacement openings are expected over this period, however, given the high percentage of older workers in these occupations approaching retirement age.

Food service supervisors enjoy stable year-round employment and are not particularly sensitive to fluctuations in economic conditions. This is reflected in the relatively low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 8,644 or less
Average Worker	$ 18,609
Highest 10% of Workers	$ 34,292 or more

Source: 1986 Census

Chefs and Cooks 6121

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,863	2.3	2.8	963
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	890	159
Grand Falls	210	62
Stephenville	165	51
Corner Brook	255	61
Labrador	145	33
Harbour Grace	120	29
Clarenville	165	36
Marystown	125	46
Gander	185	46

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	34	66	26	62	12	76	24
	1986	36	64	21	71	8	74	26
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)		
Services (82)	**Trade (6)**	**Public Administration (4)**
- Accommodation & Food (64)	- Retail (6)	- Federal (3)
- Health & Welfare, Non-Hospital (5)		- Provincial (1)
- Hospitals (5)		

Chefs and Cooks 6121

Job Environment

This occupational group includes all types of cooks - institutional, short-order and specialty cooks, as well as chefs. Chefs plan and direct food preparation and cooking activities, and may prepare and cook food on a regular basis. They may be responsible for planning menus, ensuring quality, estimating material and labour costs, administering budgets, hiring staff and supervising cooks.

Cooks prepare and cook food under the direction of chefs, dieticians or nutritionists. Cooks may work independently, planning and preparing menus, or they may manage a kitchen and supervise staff.

Chefs and cooks are employed in restaurants, hotels, hospitals, cafeterias and similar establishment.

Training and Qualifications

Training for these occupations takes place through an apprenticeship program consisting of three years of on-the-job training including eight weeks of in-school training each year. The period of apprenticeship can be reduced to two years with the completion of the nine- to ten-month pre-employment program in commercial cooking available at the Cabot Institute and various community colleges around the province. Several years of experience and possibly additional training may be required to qualify for chefs' positions. The Marine Institute offers a 36-week program in marine cooking which is recognized by the Provincial Apprenticeship Board as year one in the apprenticeship program.

Nature of Supply

Many people in these occupations have no formal post-secondary education but received their training on-the-job. At the time of the 1986 Census women accounted for 64% of employment in this occupational area, a slight decrease from 1981. With regard to age distribution, this occupation matched the overall average in terms of the proportion of young people and older workers. Chefs and cooks are employed in all areas of the province.

Job Prospects

Employment in this occupation increased slightly between 1981 and 1986 and growth for the decade as a whole is estimated to have been above average. Prospects should remain strong into the 1990s with employment of chefs and cooks expected to expand at a slightly faster than average rate over the next five years. This view is based on the outlook for accommodation and food services, health and welfare, retail trade and public administration where most chefs and cooks are employed. A large number of replacement openings are also expected over this period as those presently employed in the occupation retire or leave the workforce for other reasons.

Generally speaking, this occupation offers stable year-round employment and is only mildly sensitive to fluctuations in economic activity. However, some positions may be seasonal as employment levels tend to rise during the summer months. The number of U.I. beneficiaries relative to employment in this occupation is roughly in line with the provincial labour market average. Short order cooks account for about 70 percent of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 6,619 or less
Average Worker	$ 15,395
Highest 10% of Workers	$ 29,594 or more

Source: 1986 Census

Food and Beverage Serving Occupations 6125

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,926	1.9	3.6	1,007
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	995	189
Grand Falls	220	60
Stephenville	175	46
Corner Brook	280	97
Labrador	135	15
Harbour Grace	95	35
Clarenville	120	41
Marystown	80	19
Gander	200	72

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	12	88	48	50	2	68	32
	1986	15	85	43	54	3	60	40
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (85)	Trade (8)	Transport, Communications & Utilities (5)
- Accommodation & Food (71)	- Retail (8)	- Water Transport (5)
- Health & Welfare, Non-Hospital (6)		
- Hospitals		

Food and Beverage Serving Occupations 6125

Job Environment

This occupational group includes a variety of positions in food service, from buspersons to formal dining room waiter or waitress. Waiters and waitresses take patron's orders, serve food and beverages, and provide a high level of service. They may move into one of a range of related occupations: host, wine steward, food and beverage manager, banquet supervisor or even restaurant, resort or hotel manager. Buspersons assist waiters and waitresses and perform duties related to cleaning up and setting of tables. Typically, people in this occupation work indoors in shifts. Waiters and waitresses are continuously on their feet and the pace of work may become hectic during meal-time peaks. Patience is required, as these people must deal quickly but pleasantly with all types of customers.

Training and Qualifications

There is no set educational requirement for employment in these occupations, however employment prospects are enhanced with the completion of formal training in the field. Some community colleges in the province offer nine-month programs in hospitality services or hotel restaurant services. The Cabot Institute offers a twelve-week program for waiters/waitresses. Some private colleges in the province offer similar programs of varying duration.

Nature of Supply

Most people in these occupations have no formal post-secondary education and enter the workforce directly from high school. Women account for a majority of employment in this occupational area. The percentage of young people in this group is double the all occupation average, reflecting the entry level nature of many of these positions. The lower than average proportion of older workers suggests that many people move on to other occupations later in their careers.

Job Prospects

Employment in these occupations was unchanged between 1981 and 1986. However, the situation improved in the latter half of the decade and growth for the 1980s as a whole was slightly above average. Prospects should continue to improve in the 1990s, and employment growth over the next five years is expected to be above average. This view is based on the outlook for a range of industries that employ these occupations and, most notably, the accommodations and food services sector. A significant number of replacement openings are also expected over this period. About half the job opportunities that arise by 1995 are expected to be existing jobs that become vacant. This is not surprising given the fairly high turnover rate for the occupations.

While many people in these occupations are employed year-round, some positions may be seasonal as employment levels tend to rise during the summer months. The occupations are somewhat sensitive to fluctuations in economic conditions since people generally eat out less often during tough economic times. The number of U.I. beneficiaries relative to employment in the occupation is equal to the overall labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 5,650 or less
Average Worker	$ 12,279
Highest 10% of Workers	$ 22,409 or more

Source: 1986 Census

Barbers, Hairdressers and Related Occupations 6143

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,608	2.1	1.8	444
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	465	48
Grand Falls	150	15
Stephenville	60	9
Corner Brook	100	24
Labrador	55	7
Harbour Grace	105	13
Clarenville	45	11
Marystown	55	7
Gander	90	9

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	20	80	41	53	6	73	27
	1986	13	87	38	59	3	76	24
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (99)
- Personal (97)
- Health & Welfare, Non-Hospital (1)

Trade (1)
- Retail (1)

Barbers, Hairdressers and Related Occupations

6143

Job Environment

This occupational group includes beauticians, cosmetologists, haircutters, hairstylists and other hair care specialists. Hairdressers and barbers provide many different services such as cutting, styling, colouring, cleaning, curling and perming. This work is largely manual and is done constantly on one's feet. Typically, barbers and hairdressers work in shops, homes or hospitals.

Training and Qualifications

These occupations require some high school education and the completion of a community college program. The Cabot Institute and various community colleges in the province offer hairstylist programs ranging in duration from nine to eleven months. Graduates are eligible to continue in an apprenticeship program to qualify for journeyperson status.

Nature of Supply

Most people in this occupation have completed a community college program in hairstyling. The percentage of women in this field continues to rise. At the time of the 1986 Census they accounted for 87 percent of employment, compared to 80 percent in 1981 and 54 percent in 1971. The percentage of young people is double the average for all occupations. The lower than average proportion of older workers in these occupations suggests that many barbers/hairdressers retire relatively early in their careers. These occupations can be found in all regions of the province.

Job Prospects

The number of hairstylists employed in the province increased by over 30 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been above average. Slightly slower growth is expected over the next five years, but the occupation should still expand at about the average rate for all occupations. In addition, fairly high turnover in this occupational area will result in a large number of replacement openings over this period. In fact, vacancies in existing jobs is expected to exceed the number of new positions by a two to one margin.

Generally speaking, hairstylists enjoy stable year-round employment and are not significantly affected by fluctuations in economic conditions. Part-time employment is fairly common. The number of U.I. beneficiaries relative to employment in the occupation is considerably lower than the provincial labour market average. Self-employment is a possibility in this occupation.

1985 Annual Earnings

Lowest 10% of Workers	$ 6,660 or less
Average Worker	$ 12,844
Highest 10% of Workers	$ 20,945 or more

Source: 1986 Census

Nursery and Related Workers 7195

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	684	3.5	2.4	153
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	290	23
Grand Falls	60	9
Stephenville	40	3
Corner Brook	70	14
Labrador	15	0
Harbour Grace	15	3
Clarenville	40	1
Marystown	35	0
Gander	55	3

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	89	11	43	44	13	82	18
	1986	88	12	42	48	10	77	23
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Services (36)	Public Administration (19)	Construction (17)
- Miscellaneous (17)	- Provincial (12)	
- Accommodation & Food (7)	- Local (6)	
- Personal (5)	- Federal (2)	

Nursery and Related Workers 7195

Job Environment

This group includes nursery workers, groundskeepers, landscape gardeners, flower growers and grounds maintenance workers. Nursery workers plant, cultivate and harvest trees, shrubs, and ornamental and flowering plants in greenhouses, nurseries and grounds. Their duties involve preparing soil, transplanting plants and grafting, spray watering and pruning plants, trees and shrubs. When plants are ready for shipping, they wrap the roots and earth in plastic sheeting and burlap to ensure safe transportation. Most of the work is manual, requiring considerable bending, stooping, kneeling and lifting, but much of the heaviest work is now done by machine. Nursery work involves handling water, chemical fertilizers, soil and plant stock, often in climate-controlled conditions that may be uncomfortable. During the warm months of the year, nursery work is done outdoors as well as indoors, and sometimes nursery workers must deal with the public, providing information and advice to customers and assisting in the selection of products.

Training and Qualifications

There are no set educational requirements for this occupation as training often takes place on the job. However, employment prospects would be greatly enhanced with the completion of a community college program in horticulture technology or a related area. No such courses are offered in Newfoundland but are available in other provinces.

Nature of Supply

Roughly one-third of the people employed in this occupational area have some form of post-secondary education but relatively few in a related subject area. The occupation is male-dominated with women accounting for just 12 percent of employment in 1986. The percentage of young people is double the average for all occupations. Almost half the nursery workers in the province reside in the St. John's area but the occupation can be found in all regions of the province.

Job Prospects

Employment in this occupation increased by over 20 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been above average. Job prospects should slow somewhat in the 1990s, but employment is still expected to expand at the average rate for all occupations over the next five years. This view is based on the outlook for various components of the service sector, public administration and the construction industry where most nursery workers in the province are employed. A significant number of replacement openings are expected over this period as well.

Many nursery workers are employed on a seasonal basis with employment levels rising during the summer months. The occupation is not overly sensitive to fluctuations in economic conditions with the possible exception of nursery workers employed in the construction industry who are dependent on the overall level of construction activity in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 18,755
Highest 10% of Workers	N/A

Source: 1986 Census

Captains and Other Officers, Fishing Vessels 7311

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%)		Number of Job Openings 1990 - 1995
		Estimated 1981 - 1990	Projected 1990 - 1995	
This Occupation	381	-2.7	0.4	60
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	40	4
Grand Falls	40	7
Stephenville	45	5
Corner Brook	60	6
Labrador	0	0
Harbour Grace	60	0
Clarenville	15	4
Marystown	80	3
Gander	40	1

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	99	1	8	78	14	93	7
	1986	100	0	6	78	16	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Fishing (61)	**Manufacturing (39)** - Fish Products (39)

Captains and Other Officers, Fishing Vessels 7311

Job Environment

Captains, skippers and mates command fishing vessels and crews and oversee workers engaged in vessel operation and in harvesting, cleaning and refrigerating the catch. They are also responsible for vessel and equipment maintenance. The work requires physical stamina and frequently involves long and irregular hours in harsh weather conditions.

Training and Qualifications

There are no educational requirements for skippers of inshore fishing vessels. The Marine Institute offers a number of short programs (4-12 weeks) in various aspects of fishing vessel and gear operation. Deck officers on offshore fishing vessels receive training through a combination of on-the-job training (sea time) and classroom instruction. Training for various certificate levels is available at the Marine Institute.

Nature of Supply

Employment in this occupation is entirely dominated by men. The lower than average percentage of young people and higher than average percentage of older workers is not surprising given the responsible nature of these positions. Captains and other officers of fishing vessels can be found in almost all regions of the province.

Job Prospects

According to census information, employment in these occupations declined by almost 15 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been negative. Little in the way of employment growth is expected over the next five years given the outlook for the fishing and the fish processing sectors where these occupations are concentrated. However, a significant number of replacement openings are expected over this period given the number of people in these occupations approaching retirement age.

Officers of large fishing vessels are employed on a year-round basis while those on smaller vessels work on a seasonal basis. Employment in these occupations is affected by fluctuations in market conditions as well as by non-economic factors, such as declining fish stocks or quota allocations. Fish stock depletion in recent years has had a negative impact on employment in these occupations. Future employment growth will depend on stock growth. Since some important fishing grounds lie just outside Canada's jurisdiction, stock rebuilding may continue to be hampered by overfishing on the part of some foreign countries.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 38,631
Highest 10% of Workers	N/A

Source: 1986 Census

Forestry Conservation Occupations 7511

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	201	1.5	0.2	41
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	35	13
Grand Falls	30	10
Stephenville	15	2
Corner Brook	50	13
Labrador	10	0
Harbour Grace	5	1
Clarenville	10	2
Marystown	0	0
Gander	20	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	27	73	0	98	2
	1986	97	3	25	61	14	92	8
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Forestry (77)	Public Administration (21)	Services (3)
	- Provincial (21)	- Accommodation & Food (3)

Forestry Conservation Occupations

7511

Job Environment

People in this occupation group work to protect forests from fire, disease and other hazards. The work can range from fighting forest fires and manning lookout towers to serving as park ranger or aerial observer. Most of the work is performed outside and sometimes involves risk. The work can require travel through the forest by foot, or vehicle to report on hazardous conditions, rainfall, soil content and to look for lost people. Forest fire officers train and lead fire-fighting crews, arrange for their provisions and co-ordinate fire-fighting operations.

Training and Qualifications

Educational requirements for these occupations vary but employment prospects are greatly enhanced with the completion of a community college program in forestry or a related field. The Fisher Institute offers a two-year program in forest resources technology. The Western Community College offers a nine-month forest ranger program.

Nature of Supply

Over a third of the people employed in this occupational area have some form of post-secondary education. The occupation is male dominated, as only 3 percent of these positions were held by women at the time of the 1986 Census. The proportion of young people in this field is slightly higher than average, while the share of employment made up of older workers is almost double the average for all occupations. People employed in forestry conservation are located in most areas of the province.

Job Prospects

Employment in these occupations declined slightly between 1981 and 1986. The situation improved somewhat in the latter half of the decade, and employment growth for the 1980s as a whole is estimated to have been about average. Prospects are expected to slow in the 1990s and employment expansion is expected to be below average over the next five years. This view is based on the outlook for the forestry and provincial government sectors where most people involved in forestry conservation are employed. However, a significant number of replacement openings are expected over this period given the relatively large number of older workers in the occupations approaching retirement age.

In this province, employment in forestry conservation is highly seasonal as unemployment levels rise during the winter months. These occupations are also somewhat sensitive to fluctuations in economic conditions though perhaps less so than other occupations in the forestry sector. The number of U.I. beneficiaries shown here increases fivefold during the winter months.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 20,361
Highest 10% of Workers	N/A

Source: 1986 Census

Rotary Well-Drilling and Related Occupations 7711

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	11	-22.3	39.0	46
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	25	17
Grand Falls	0	1
Stephenville	0	0
Corner Brook	5	2
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	2
Gander	0	3

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	94	6	58	42	0	93	7
	1986	95	5	19	81	0	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Mining (100)
- Mining Services (100)

Rotary Well-Drilling and Related Occupations 7711

Job Environment

These occupations are engaged in the operation and maintenance of oil and gas well-drilling units. The entry level position on a drilling unit, called roustabout, is responsible for basic tasks such as cargo work, maintenance and general labour duties. The actual drilling crew usually consists of a driller, assistant driller, derrickhand and a number of floorhands or roughnecks as they are sometimes called. Their work involves assembling and operating drills, lowering and raising drill pipes, bits and instruments and inspecting, testing and servicing wells. In Newfoundland, these positions are found on offshore drilling rigs and drillships. As such, these occupations work long hours in remote locations often under adverse weather conditions. Work schedules are normally three weeks on/three weeks off or similar basis.

Training and Qualifications

Historically, training for these positions has been through a combination of on-the-job training and company training programs. Recruits would begin at the entry level position called roustabout and progress to more senior drilling positions over time. However, employers more and more are looking for persons with post-secondary education in a related area such as resource drilling technology. Graduates of the three-year Petroleum Engineering Technology program offered by the Cabot Institute are qualified as engineering technologists although they would be exposed to drilling technology as a part of the program.

Nature of Supply

At the time of the 1986 Census, most of the people working in these occupations had no formal post-secondary educational qualifications, although a small percentage had completed a program in engineering technology. The vast majority were men. The proportion of young people in these occupations is roughly equal to the all-occupation average. The lack of older workers is not surprising given the physical demands of these occupations. At the time of the 1986 Census most people employed in rotary well-drilling in the province resided in the St. John's area.

Training and Qualifications

Employment in rotary well-drilling occupations declined between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Job prospects should improve considerably over the next five years and employment growth is expected to be well above average over the projection period. This view is based on the outlook for mining services where these occupations are concentrated. Approximately 50 positions are expected to be created by 1995 as offshore exploration activity picks up from the low levels experienced in recent years. Production from Hibernia field will offer additional opportunities later in the decade.

Offshore oil exploration and development is extremely expensive so the industry tends to be very sensitive to a number of factors, most importantly the price of oil, but also government incentives, and supply considerations. For these reasons, employment in well-drilling occupations is highly sensitive to fluctuations in economic conditions in general and to oil prices in particular. As such, the employment projections provided above may not be realized.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 30,970
Highest 10% of Workers	N/A

Source: 1986 Census

Rock and Soil Drilling Occupations 7713

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	150	-2.5	4.8	54
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	10	2
Grand Falls	55	24
Stephenville	0	1
Corner Brook	10	3
Labrador	40	0
Harbour Grace	15	1
Clarenville	15	2
Marystown	5	0
Gander	5	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	7	93	0	99	1
	1986	100	0	5	78	17	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Mining (63)
- Metals (30)
- Mining Services (20)
- Non-Metals (10)

Construction (23)

Services (10)
- Business (7)
- Education (3)

Rock and Soil Drilling Occupations

7713

Job Environment

This occupational group includes air-drill operators, blasthole drillers, auger operators and water well drillers. Their work involves using explosives in underground and surface mining, in quarries and on construction projects; operating drills; breaking and separating rock; and installing air and water pipelines leading to the working surface. The physical demands of the work are heavy and work can be above ground or underground. Although workers are exposed to difficult conditions, safety, health and sanitary standards are rigidly monitored and hazards are known, recognized and controlled.

Training and Qualifications

There are no formal educational requirements for this occupation. Most drillers acquire their skills through on-the-job training and experience under the supervision of an experienced driller or miner. However, employment prospects would be enhanced with the completion of a community college program in a related area. The Western Community College offers a two-year program in mineral technology.

Nature of Supply

Most people in these occupations have no formal post-secondary education although a small percentage have completed a community college program. At the time of the 1986 Census these occupations were entirely dominated by men. The percentage of young people was well below average while the proportion of older workers was double the average for all occupations. This may be related to a decrease in employment in these occupations in the early 1980s. Younger workers with relatively little experience tend to be the first ones laid off when employment declines. While these occupations can be found in most areas of the province, the largest concentrations are in the Grand Falls and Labrador CEC areas.

Job Prospects

Employment in these occupations declined by over 40 percent between 1981 and 1986. Most of the decrease occurred in the province's metal mining industry. The number employed in the construction sector actually increased slightly. Employment levels for the 1980s are estimated to have decreased for these occupations. Job prospects should improve considerably over the next five years and growth in these occupations is expected to be above average over the projection period. This view is based on the outlook for the mining, construction and business services sectors where most people in these occupations are employed. In addition, a significant number of replacement positions are expected over this period given the relatively large proportion of older workers in this occupational group.

Employment in these occupations tends to be somewhat seasonal with unemployment rates rising during the winter months. Rock and soil drilling occupations are also somewhat sensitive to fluctuations in economic activity in as much as the mining and construction sectors are affected. Periods of unemployment can be expected with mineral prices fall or construction activity slows. The number of U.I. beneficiaries relative to employment in this occupational area is roughly in line with the provincial labour market average. Beneficiary levels are considerably higher during the winter months.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 37,632
Highest 10% of Workers	N/A

Source: 1986 Census

Blasting Occupations

7715

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	46	-2.9	3.6	15
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	10	1
Grand Falls	0	0
Stephenville	5	1
Corner Brook	0	1
Labrador	10	0
Harbour Grace	15	0
Clarenville	0	0
Marystown	0	0
Gander	0	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	100	0
	1986	100	0	13	80	7	93	7
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Mining (50)
- Metals (25)
- Non-Metals (25)

Construction (38)

Transport, Communications, & Utilities (12)
- Electric Power (12)

Blasting Occupations

7715

Job Environment

This group includes oil-well shooters, dynamiters, chute blasters and seismograph shooters, who are concerned with detonating explosives to demolish structures on construction sites and with mineral, oil and natural gas exploration. This type of work is usually performed outdoors. While exposure to gas fumes and noxious vapours is unavoidable, proper use of safety equipment minimizes risk.

Training and Qualifications

Training for this occupation traditionally takes place on the job under the supervision of a qualified blaster. However, entry into this occupation would be enhanced with the completion of some formal training. The Central Community College offers a blaster training program which combines three periods of classroom instruction (4-6 weeks each) in combination with actual job experience.

Nature of Supply

Approximately one-third of people employed in blasting occupations have some form of post-secondary education either in engineering technology or in a construction trade. The occupation was entirely dominated by men at the time of the 1986 Census. The proportion of young people is below average reflecting the fact that many blasters in the province are trained on-the-job after having acquired several years of experience working on mining or construction sites. The proportion of older workers in this occupation is equal to the overall average for all occupations. Blasters are employed in several areas of the province.

Job Prospects

Employment in these occupations decreased by 35 percent between 1981 and 1986 with both the mining and construction sectors experiencing declines in employment. Employment growth for the decade as a whole is estimated to have been negative. Higher than average employment growth is expected over the next five years based on the outlook for the mining, construction and electric power sectors where most blasters in the province are employed. A number of replacement openings are also expected over this period. While the total number of job openings is high relative to employment levels, the absolute number is not large, reflecting the relatively small size of this occupation in the province.

In Newfoundland, employment in this occupation tends to be seasonal with unemployment rates rising during the winter months. The number of U.I. beneficiaries can be expected to increase tenfold during the winter compared to the level shown here. The occupation is also somewhat sensitive to fluctuations in economic activity in as much as the mining and construction sectors are affected.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 29,471
Highest 10% of Workers	N/A

Source: 1986 Census

Baking 8213

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	798	8.8	3.1	232
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	245	18
Grand Falls	70	6
Stephenville	25	3
Corner Brook	40	7
Labrador	40	3
Harbour Grace	50	9
Clarenville	35	9
Marystown	15	5
Gander	70	14

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	56	44	46	45	9	75	25
	1986	40	60	34	62	4	75	25
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (65)
- Retail (63)
- Wholesale (2)

Manufacturing (19)
- Food and Beverage (19)

Services (15)
- Accommodation & Food (15)

Baking

8213

Job Environment

This group includes occupations concerned with making bakery and confectionery products such as breads, cakes and pastries. Bakers must understand the procedures and methods necessary for the hygienic production of baked goods. These procedures include personal sanitation, equipment sanitation, sterilization, and correct refrigeration and storage of raw ingredients and baked products. In large bakeries, operations have been streamlined in order to employ machinery, and each worker performs only selected tasks. In medium-sized bakeries, some functions are performed by hand rather than machine. In small bakeries, the baker performs all required tasks.

Training and Qualifications

Training for this occupation may take place on the job, however employment prospects would be enhanced with the completion of a commercial baking course. The Cabot Institute and the Western Community College offer programs in commercial baking ranging in duration from nine to ten months.

Nature of Supply

Most people in this occupational area have no post-secondary qualifications and received their training on-the-job. In 1981, men held a slight majority of the jobs in this occupation but by 1986 women had increased their share of employment to 60 percent. Young people account for a higher than average proportion of bakers compared to other occupations. This may be due to the relatively low educational requirements for many positions. The proportion of older workers was half the average for all occupations. Bakers are employed in all regions of the province.

Job Prospects

Employment in this occupation increased by almost 70 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. Job prospects are expected to slow over the next five years, but employment should still expand at a faster rate than the average for all occupations. This view is based on the outlook for the retail trade, manufacturing and food services sectors where most bakers in the province are employed. A significant number of replacement openings are also expected over this period.

Bakers enjoy stable year-round employment and are not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in the occupation is considerably lower than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 8,502 or less
Average Worker	$ 14,757
Highest 10% of Workers	$ 22,954 or more

Source: 1986 Census

Machinist and Machine Tool Setting-Up Occupations 8313

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	280	-2.1	5.8	114
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	110	22
Grand Falls	35	2
Stephenville	5	6
Corner Brook	35	3
Labrador	15	0
Harbour Grace	10	3
Clarenville	5	3
Marystown	5	0
Gander	40	7

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	17	75	8	96	4
	1986	98	2	17	72	11	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (50)	Services (22)	Transport, Communications & Utilities (13)
- Metal Fabricating (19)	- Education (11)	- Rail Transport (6)
- Pulp & Paper (9)	- Miscellaneous (9)	- Miscellaneous (4)
- Shipbuilding (6)	- Business (2)	- Electric Power (2)

Machinist

8313

Job Environment

Machinists operate metal-working machines according to the specifications of engineers or designers. They set up metal-working machinery (such as lathes, drill presses and boring machines), read and interpret specifications and blueprints, calculate dimensions and tolerances, lay out their work and mark pieces for machining. Some machinists specialize in certain types of equipment or materials.

Machinists work indoors, usually in areas that are noisy, dirty and potentially hazardous. They must frequently lift and carry objects, and most of their work is done on their feet. A five-day work week of 35 to 40 hours is standard, and shift work and overtime are common.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. The Cabot Institute and various community colleges around the province offer pre-employment programs in machining ranging in duration from nine to ten months. Graduates of these programs are qualified as apprenticed machinists. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing inter-provincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction.

Nature of Supply

Most people in this occupation have completed a community college program with relatively few acquiring the training on-the-job. Most machinists in the province are male, although there were some women in the occupation at the time of the 1986 Census. The proportion of young people in the occupation is somewhat lower than average while the percentage of older workers is slightly higher than average. This is not surprising given the highly skilled nature of the occupation. Although the largest concentration of machinists is in the St. John's area, the occupation can be found in all areas of the province.

Job Prospects

Employment in this occupation declined by almost 20 percent between 1981 and 1986. Decreases were recorded in the mining, pulp and paper, ship building, and water transport sectors, while employment levels increased in the metal fabrication industry. Employment growth for the decade as a whole is estimated to have been negative. Job prospects should improve considerably over the next five years with employment expansion expected to be above average to 1995. This view is based on the outlook for the metal fabricating, pulp and paper, and ship building industries where many machinists are employed. The metal fabrication and ship building industries are expected to benefit indirectly from the Hibernia development. A number of replacement openings are also expected over this period given the number of machinists approaching retirement age.

For the most part, machinists enjoy stable year-round employment. The occupation is somewhat sensitive to fluctuations in economic activity, however, so periods of unemployment may occur during economic recessions, particularly if the province's manufacturing industries are affected. The number of U.I. beneficiaries relative to employment in the occupation is slightly lower than the average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 15,434 or less
Average Worker	$ 26,824
Highest 10% of Workers	$ 39,699 or more

Source: 1986 Census

Sheet Metal Workers 8333

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	159	0.5	7.6	70
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	75	50
Grand Falls	25	4
Stephenville	5	9
Corner Brook	25	5
Labrador	0	0
Harbour Grace	5	12
Clarenville	0	4
Marystown	0	2
Gander	5	6

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	21	79	0	94	6
	1986	100	0	14	76	10	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (64)	Manufacturing (21)	Services (4)
	- Pulp and Paper (14) - Machinery (4) - Shipbuilding (4)	- Miscellaneous (4)

Sheet Metal Workers

8333

Job Environment

These workers fabricate products made of sheet metal mainly in the metal fabricating and construction industries. Workers employed in construction fabricate duct work, metal walls and siding, kitchen assemblies and roof drainage systems. Those employed in shops fabricate sheet metal assemblies prior to installation in buildings. Sheet metal workers perform diverse activities which include draughting patterns, measuring and laying out templates, and shaping and fastening sheet metal (copper, steel and aluminium). They may use hand tools and machines such as brakes, shears or rollers.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. The ten-month pre-employment program in sheet metal work offered by the Cabot Institute qualifies graduates as apprenticed sheet metal workers. Having worked in the trade, apprentices can complete three additional periods of formal training (8 weeks each) preparatory to writing interprovincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction.

Nature of Supply

Most sheet metal workers in the province have completed a community college or trade school program. All are male. The proportion of young people in the occupation declined between 1981 and 1986 to well below the overall average. This may have been related to the employment decline which occurred over this period. The percentage of older workers in the occupation was slightly higher than average. Most sheet metal workers are employed in the larger urban areas of the province.

Job Prospects

Employment in this occupation declined by over 12 percent between 1981 and 1986. Employment growth for the decade as a whole is estimated to have been positive but below average. Job prospects should improve considerably in the 1990s as the Hibernia development and related activity increases the demand for sheet metal workers. The occupation should experience above average employment growth over the next five years. This view is based on the outlook for construction and various components of the manufacturing industry where most sheet metal workers are employed. A number of replacement openings are also expected over this period given the percentage of sheet metal workers approaching retirement age.

Many people in this occupation are employed on a seasonal basis with unemployment levels rising during the winter months when construction activity slows. Those employed in manufacturing industries such as pulp and paper tend to be employed on a year-round basis. The occupation is also somewhat sensitive to fluctuations in economic activity. Job opportunities may be scarce during periods of economic recession. The number of U.I. beneficiaries relative to employment in the occupation is considerably higher than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 24,233
Highest 10% of Workers	N/A

Source: 1986 Census

Welding Occupations 8335

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	982	0.1	9.1	606
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	350	87
Grand Falls	80	32
Stephenville	30	39
Corner Brook	65	22
Labrador	170	7
Harbour Grace	50	31
Clarenville	25	17
Marystown	75	33
Gander	60	21

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	99	1	15	80	5	94	6
	1986	100	0	11	84	5	94	6
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (35)
- Shipbuilding (9)
- Food and Beverage (7)
- Metal Fabrication (7)

Services (18)
- Miscellaneous (15)
- Education (2)

Mining (18)
- Metals (15)
- Mining Services (1)
- Non-Metals (1)

Welding Occupations

8335

Job Environment

Welding occupations involve the joining and cutting of metals using welding equipment. Numerous specialties exist, depending on the type of welding equipment and techniques used, the nature of the final product and the degree of expertise required. Arc, gas, combination, submerged arc, resistance and pressure vessel welding are among the specialties as is welding-fitting. Usually welders must know several welding techniques, even though they might only use one or two in their jobs.

Construction welders work mainly outdoors at construction sites, whereas production welders, employed to assist manufacturing processes, work indoors on a shop or factory floor. The physical demands of welding may be heavy. Lifting and carrying heavy items is often required, as are prolonged periods of standing and crouching. As well, a welder may be exposed to very hot temperatures, noise, fumes, and dust.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. The Cabot Institute and various community colleges around the province offer pre-employment programs in welding ranging in duration from nine to ten months. Graduates of these programs are qualified as apprenticed welders. Having worked in the trade, apprentices can complete two additional periods of formal training prior to writing inter-provincial journeyperson's examinations. As an alternative, one can complete three years of on-the-job training in combination with three periods of in-school instruction.

In addition to the pre-employment program, the Eastern Community College offers a two-year welding engineering technician program. Students in this program are exposed to a broader range of topics including welding inspection and quality control. The Western Community College offers a nine-month program in non-destructive testing of welds. Students study a variety of testing procedures including liquid penetrant inspection, magnetic particle inspection, and ultrasonic inspection.

Nature of Supply

The vast majority of welders in the province have completed a community college or trade school program. All are men. The decrease in the percentage of young people in the occupation between 1981 and 1986 may be related to the decline in employment over this period. The proportion of older workers in the occupation was also below average. Welders are employed in all areas of the province.

Job Prospects

Employment in this occupation declined by over 15 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been below average. Job prospects should improve considerably in the 1990s largely as a result of the Hibernia development and related activity. The Hibernia project alone will employ between 500 and 600 welders during peak construction periods in 1993 and 1994. Employment growth to 1995 is projected to be well above average. This view is based on the outlook for a number of industries which employ welders including manufacturing, mining and components of the service sector. A number of replacement openings are also expected over this period.

Some welders in the province are employed on a seasonal basis with unemployment levels rising during the winter months. The occupation is also sensitive to fluctuations in economic conditions and job opportunities may be scarce during economic slowdowns. Employment levels can also be expected to fall after the completion of major projects, such as the Hibernia development. The number of U.I. beneficiaries relative to employment in the occupation is slightly higher than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 16,773 or less
Average Worker	$ 27,612
Highest 10% of Workers	$ 39,050 or more

Source: 1986 Census

Boilermakers, Platers and Structural Metal Workers 8337

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	48	-10.5	14.1	45
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	35	19
Grand Falls	0	0
Stephenville	0	5
Corner Brook	0	0
Labrador	0	0
Harbour Grace	0	1
Clarenville	5	3
Marystown	20	7
Gander	0	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	19	81	0	94	6
	1986	100	0	4	87	9	92	8
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (42)	Transport, Communications & Utilities (33)	Construction (17)
- Shipbuilding (33) - Metal Fabricating (8)	- Rail Transport (25) - Water Transport (8)	

Boilermakers, Platers and Structural Metal Workers 8337

Job Environment

Boilermakers fabricate, assemble and repair boilers, tanks, pressure vessels and other heavy metal structures, which are used in a variety of industrial settings, such as chemical and petrochemical manufacturing, pulp mills, oil and gas refining and ship building. Boilermakers fabricate components of boilers and tanks in a shop or factory and then install or assemble the final products on site. In their work, boilermakers interpret detailed plans and make measurements for metal plates and tubes, using a wide range of metal working machines, welding equipment and other hand and power tools.

Working conditions are often cramped and uncomfortable, and involve exposure to chemical vapours, wetness or high noise levels. When inside boilers and other vessels, boilermakers must often work at considerable heights. Protective clothing and other safety gear is routinely used.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. Apprentices receive three years of on-the-job training including three periods (8 weeks each) of in-school instruction prior to writing interprovincial journeyperson's examinations.

Nature of Supply

Most boilermakers, platers, and structural metal workers in the province have completed a community college or trade school program. All are men. The percentage of young people in the occupation declined dramatically between 1981 and 1986. This may be related to the steep decline in employment levels observed over this period. Hence, there were few opportunities for young people to enter this occupational area at that time. The proportion of older workers was equal to the average for all occupations. At the time of the 1986 Census, boilermakers, platers, and structural metal workers were employed in the St. John's, Marystown, and Clarenville area.

Job Prospects

Employment in this occupation declined by over 50 percent between 1981 and 1986. Many industries employed fewer boilermakers over this period but the largest declines occurred in ship building and construction. Employment levels by the end of the decade are estimated to have declined even further. Job prospects are expected to improve over the next five years, however. The Hibernia development and related activity should lead to increased opportunities in this occupational area. Employment growth to 1995 should be well above the average for all occupations. This view is based on the outlook for ship building, metal fabricating, construction, and water transport were most people in this occupational area are employed. A number of replacement openings are also expected, given the number of boilermakers approaching retirement age.

Many boilermakers, platers, and structural metal workers, particularly those in construction, are employed on a seasonal basis with unemployment levels rising during the winter months when construction activity slows. Those employed in ship building are employed on a project by project basis and, so, are dependent on the volume of work. Periods of unemployment are not uncommon as one project ends before another begins. As such, this occupational area is sensitive to fluctuations in economic conditions and job opportunities may be scarce during economic slowdowns. The number of U.I. beneficiaries relative to employment in these occupations is considerably higher than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 22,982
Highest 10% of Workers	N/A

Source: 1986 Census

Electrical and Related Equipment Installing and Repairing Occupations

8533

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	586	1.1	4.2	203
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	170	23
Grand Falls	60	1
Stephenville	35	1
Corner Brook	65	1
Labrador	35	1
Harbour Grace	55	7
Clarenville	0	0
Marystown	45	4
Gander	55	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	99	1	17	75	8	93	7
	1986	100	0	7	88	5	93	7
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (36)
- Food and Beverage (15)
- Pulp and Paper (10)
- Shipbuilding (5)

Trade (20)
- Retail (18)
- Wholesale (2)

Transport, Communications & Utilities (16)
- Electric Power (9)
- Radio & TV Broadcasting (2)
- Miscellaneous (2)

Electrical and Related Equipment Installing and Repairing Occupations

8533

Job Environment

This group includes a wide range of electrical and related equipment installing and repairing occupations such as aircraft and automobile electricians, refrigeration mechanics and major appliance repairers. Their responsibilities include installing, servicing, repairing and rebuilding electrical equipment. Electricians must be familiar with a wide range of diagnostic equipment such as ammeters, voltmeters and ohmmeters, and with repair equipment such as pliers, wirecutters, crimping tools and soldering tools. They often work from technical drawings, wiring diagrams or blueprints. The work environment may vary from a customer's home to a shop or factory, and may involve exposure to hazards that require the use of safety equipment.

Training and Qualifications

Training for these occupations takes place through apprenticeship programs. The Fisher Institute, the Marine Institute and several community colleges around the province offer nine-month pre-employment programs in basic electrical or marine electrical practice. Graduates of these programs are qualified as apprenticed electricians. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing inter-provincial journeyperson's examinations. The Central Community College offers a nine-month pre-employment program in refrigeration and air-conditioning mechanics. Graduates can complete three additional periods of formal training prior to writing journeyperson's examinations.

Nature of Supply

Most people in these occupations have completed a community college or trade school program in the electrical field. At the time of the 1986 Census, men accounted for all the employment in these occupations. The percentage of young people declined significantly between 1981 and 1986. This may be due to a lack of job opportunities for new entrants as employment levels fell over this period. The proportion of older workers was also below average. People employed in electrical installing and repairing occupations are employed in all areas of the province.

Job Prospects

Employment in these occupations declined by 10 percent between 1981 and 1986. However, the situation improved in the latter half of the decade and employment growth for the 1980s as a whole is estimated to have been equal to the average for all occupations. Above average employment growth is expected over the next five years based on the outlook for a broad range of industries which employ these occupations. A significant number of replacement openings are also expected by 1995.

For the most part, these occupations offer stable year-round employment. Some positions, particularly in the manufacturing sector, are sensitive to fluctuations in the level of economic activity and periods of unemployment are not unusual during economic slowdowns. The number of U.I. beneficiaries relative to employment in this occupational area is below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 13,397 or less
Average Worker	$ 28,340
Highest 10% of Workers	$ 42,116 or more

Source: 1986 Census

Electronic and Related Equipment Installing and Repairing Occupations

8535

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	197	6.8	3.1	42
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	105	4
Grand Falls	15	2
Stephenville	0	2
Corner Brook	30	3
Labrador	0	1
Harbour Grace	0	0
Clarenville	10	0
Marystown	5	0
Gander	15	5

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	96	4
	1986	97	3	18	79	3	86	14
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (31)
- Radio & TV Broadcasting (17)
- Telecommunications (6)
- Air Transport (3)

Trade (29)
- Wholesale (15)
- Retail (14)

Services (23)
- Business (9)
- Miscellaneous (9)
- Recreation (6)

Electronic and Related Equipment Installing and Repairing Occupations

8535

Job Environment

This group includes such occupations as electronic instrument technicians, radio repairers, radar repairers and communication technicians. Electronic equipment installers and repairers work on a variety of electronic equipment, including radio and television transmitters, computing equipment, navigational aids, radar and various types of electronic recording equipment. In repair work they test electronic components and circuits to locate and replace faulty components and wiring. Work is usually indoors, at constantly changing sites, and often requires the use of safety equipment.

Training and Qualifications

These occupations require the completion of a community college course in electronics. Various institutes and community colleges in the province offer electronics programs ranging in duration from nine months to three years. Programs offered include basic electronics, marine electronics, electronic engineering technician and electronics engineering technology with options in biomedical or communications.

Nature of Supply

Most people in these occupations have completed some type of post-secondary education, be it a community college or trade school program or an institute of technology program. A small percentage have completed a university degree. These occupations are dominated by men, with women accounting for just 3 percent of employment in 1986. The proportion of young people in these occupations increased significantly between 1981 and 1986 to approach the average for all occupations. This may be explained in part by the significant increase in employment which took place over this period. The below average proportion of older workers is a reflection of the fairly recent emergence of these occupations in the province. Just over half the people employed in electronic equipment installing and repairing occupations reside in the St. John's area.

Job Prospects

Employment in these occupations increased by over 60 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above the average for all occupations. While employment growth is expected to slow in the 1990s, these occupations should still expand at a faster than average pace over the next five years. This view is based on the outlook for a number of industries which employ electronic technicians, most notably communications, the trade sector, and various components of the service sector. Relatively few replacement openings are expected over this period, however, given the relatively young average age of those in this occupational area.

Most electronic equipment repairers are employed in stable year-round positions. They are not particularly sensitive to fluctuations in economic conditions. The increasing use of computers and other electronic equipment will help sustain the demand for these workers in the 1990s. The number of U.I. beneficiaries relative to employment in these occupations is well below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 14,158 or less
Average Worker	$ 26,709
Highest 10% of Workers	$ 41,842 or more

Source: 1986 Census

Radio and Television Repairers 8537

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	137	0.2	1.4	28
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	50	12
Grand Falls	10	0
Stephenville	10	2
Corner Brook	25	3
Labrador	0	0
Harbour Grace	5	2
Clarenville	0	0
Marystown	5	1
Gander	10	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	72	28
	1986	100	0	8	84	8	79	21
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (87)
- Retail (82)
- Wholesale (5)

Services (9)
- Business (5)
- Recreation (4)

Transport, Communications & Utilities (4)
- Radio & TV Broadcasting (4)

Radio and Television Repairers 8537

Job Environment

Radio and television repairers (a group which includes sound-equipment servicers, radio electricians and television technicians) service and repair televisions, radios, stereos, tape recorders and related equipment. This involves testing and replacing electronic and solid-state components, such as electron tubes, resistors and capacitors, and diagnosing faulty equipment. Work is usually on the customer's premises or in a repair shop.

Training and Qualifications

These occupations require the completion of a community college program. The Cabot Institute offers a two-year electronics engineering technician program. The second year of this program has an electronic service technician option. The Avalon Community College offers a ten-month program in basic electronics.

Nature of Supply

Most people in this occupation have completed some type of post-secondary education, usually a community college or institute of technology program in the electronics field. At the time of the 1986 Census the occupation consisted entirely of men. The proportion of young people was well below the all occupation average, reflecting a lack of job opportunities during the 1980s. The proportion of older workers was equal to the average for all occupations. Radio and television repairers are located in most areas of the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986 and growth for the decade as a whole, while positive, was below average. While prospects should improve somewhat over the next five years, employment expansion is still expected to remain below average. This view is based on the outlook for a number of industries which employ radio and television repairers, particularly retail trade. Most of the job opportunities that arise by 1995 are expected to be replacement openings given the number of people in the occupation approaching retirement age.

Radio and television repairers enjoy stable year-round employment and are only mildly affected by fluctuations in economic activity. However, some positions may be lost during periods of economic slowdown should consumer spending be reduced. The number of U.I. beneficiaries relative to employment in the occupation is slightly below the average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 17,236
Highest 10% of Workers	N/A

Source: 1986 Census

Cabinet and Wood Furniture Makers

8541

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	207	7.6	5.6	80
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	75	7
Grand Falls	0	4
Stephenville	10	2
Corner Brook	15	3
Labrador	5	0
Harbour Grace	30	2
Clarenville	0	1
Marystown	0	2
Gander	10	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	89	11
	1986	100	0	22	63	15	91	9
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (62)	Construction (17)	Trade (14)
- Wood (31) - Furniture (31)		- Wholesale (14)

Cabinet and Wood Furniture Makers

8541

Job Environment

This group includes cabinet makers, bench carpenters and other wood furniture makers, repairers and assemblers. Using blueprints, cabinet makers construct and repair wooden articles, such as furniture, cabinets, office equipment, doors, window and door frames, and fixtures. In many instances, their artistic touch is as important as their woodworking skills. In the past, furniture was totally hand-made and cabinet making and furniture making were very labour intensive, skilled trades. Today, as sophisticated machines and assembly-line techniques become more commonplace, less-skilled assemblers play a key role in furniture making. Work settings for this group include factories and custom shops where workers are exposed to noise, vibration and dust. A five-day work week of 35 to 40 hours is normal.

Training and Qualifications

Training for this occupation may take place through an apprenticeship program. The Cabot Institute and the Central Community College offer a program in Carpentry and Joinery ranging in duration from nine to ten months. Graduates of these programs are qualified as apprentice carpenters and joiners. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing journeyperson's examinations. The Avalon Community College offers a nine-month program in cabinet making. Apprenticeship training is not required for assemblers.

Nature of Supply

Many people in this occupation have no formal post-secondary education, although a number have completed a community college or trade school program. Men accounted for all the employment in this occupational area at the time of the 1986 Census. The proportion of young people in the occupation increased dramatically between 1981 and 1986 to equal the average for all occupations. This is consistent with a significant increase in job openings over this period. The proportion of older workers was almost double the average for all occupations. Cabinet makers are employed in several regions of the province.

Job Prospects

Employment in these occupations increased by over 50 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been well above average. The occupation is expected to continue to experience above average employment growth over the next five years based on the outlook for wood and furniture manufacturing, construction and wholesale trade where most cabinet makers are employed. A significant number of replacement openings are also expected over the period given the large proportion of cabinet makers approaching retirement age.

Most cabinet makers are employed on a year-round basis, although some positions may be seasonal. The occupation is somewhat sensitive to fluctuations in economic conditions in general and housing construction in particular. The number of U.I. beneficiaries relative to employment in the occupation is below the labour market average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 17,507
Highest 10% of Workers	N/A

Source: 1986 Census

Motor Vehicle Mechanics and Body Repairers

8581

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	2,614	0.2	2.1	523
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	845	159
Grand Falls	210	39
Stephenville	155	34
Corner Brook	315	53
Labrador	115	10
Harbour Grace	200	26
Clarenville	140	20
Marystown	55	8
Gander	145	22

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	27	67	6	96	4
	1986	99	1	15	78	7	92	8
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (75)
- Retail (69)
- Wholesale (6)

Transport, Communication & Utilities (14)
- Miscellaneous (7)
- Truck Transport (6)
- Water Transport (1)

Public Administration (3)
- Federal (1)
- Provincial (1)
- Local (1)

Motor Vehicle Mechanics and Body Repairers 8581

Job Environment

This occupational group consists of motor vehicle mechanics, auto body repairers, truck-trailer repairers, snowmobile repairers, mechanical unit repairers and engine repairers. They work for car dealerships, independent garages or specialty services, repairing and servicing gasoline- or diesel-powered motor vehicles. Using both common and specialized tools and equipment, they test, diagnose, disassemble, replace parts and assemblies, tune, adjust and make body repairs. The work is indoors, where exposure to noise, vibration, liquids, fumes and odours is controlled by safety regulations.

Training and Qualifications

Training for these occupations takes place through an apprenticeship program. The Cabot Institute, the Fisher Institute and several community colleges around the province offer programs in motor vehicle mechanical repair and motor vehicle body repair ranging in duration from nine to ten months. Graduates of these programs are qualified as apprentice mechanics. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing interprovincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction. The Cabot Institute also offers a three-year program in automotive technology. This program provides more in-depth training in electronic and electro-mechanical devices and controls.

Nature of Supply

Most people in these occupations have completed some form of post-secondary education, usually a community college or trade school program. The vast majority of vehicle mechanics and body repairers are men. Women accounted for just 1 percent of employment in 1986. The proportion of young people in these occupations declined significantly between 1981 and 1986. This may be related to a lack of job opportunities during this period. The percentage of older workers is equal to the average for all occupations. Mechanics and body repairers are employed in all regions of the province.

Job Prospects

Employment in these occupations declined slightly between 1981 and 1986. Employment growth for the decade as a whole, while positive, was well below average. Job prospects should improve in the 1990s with employment expected to expand at the average rate over the next five years. This view is based on the outlook for retail and wholesale trade and the transportation sector where most mechanics and body repairers are employed. A significant number of replacement openings are also expected over this period given the number of workers in the occupation approaching retirement age. In fact, almost half the job openings expected by 1995 will be from this source.

Most motor vehicle mechanics and body repairers are employed year-round, although some positions are seasonal with unemployment levels rising during the winter months. The occupations are only mildly sensitive to fluctuations in economic conditions. The number of U.I. beneficiaries relative to employment in the occupations is well below the provincial labour market average. Motor vehicle mechanics account for two-thirds and body repairers one-third of the U.I. beneficiaries in these occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 10,932 or less
Average Worker	$ 20,855
Highest 10% of Workers	$ 30,265 or more

Source: 1986 Census

Aircraft Mechanics and Repairers

8582

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	207	-4.4	2.2	76
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	60	3
Grand Falls	0	1
Stephenville	15	0
Corner Brook	20	1
Labrador	20	0
Harbour Grace	0	0
Clarenville	0	1
Marystown	0	0
Gander	45	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	14	70	16	100	0
	1986	100	0	18	76	6	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (88)
- Air Transport (85)
- Water Transport (3)

Public Administration (12)
- Federal (12)

Aircraft Mechanics and Repairers

8582

Job Environment

Aircraft mechanics perform scheduled maintenance and repair on aircraft mechanical engines, systems and equipment, checking off a list of functions before each flight in accordance with air transport regulations. An aircraft maintenance engineer, licensed by Transport Canada, certifies that the aircraft, engines and components are fit for flight. For the most part these operations are carried out in hangars but occasionally adjustments may have to be done outdoors. Workers are exposed to noise, vibration, liquids, fumes and other hazards requiring the use of safety equipment and clothing. Normally the work week is 40 hours, although overtime is often necessary and shift work is common.

Training and Qualifications

This occupation requires graduation from a community college program in aircraft maintenance engineering. Graduates of such a program, after a period of on-the-job training under the supervision of a licensed aircraft maintenance engineer, may be eligible to write examinations for their aircraft maintenance engineer's license. The Central Community College offers a two-year aircraft maintenance engineering technician program.

Nature of Supply

Most people in this occupation have completed a community college program in engineering technology. At the time of the 1986 Census, the occupation consisted entirely of men. The proportion of young people was slightly below the all-occupation average, as was the percentage of older workers in the occupation. Most aircraft mechanics are employed in the St. John's and Gander regions of the province.

Job Prospects

Employment in this occupation declined by almost 40 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Prospects should improve somewhat in the 1990s with employment levels expected to expand at the average rate for all occupations over the next five years. This view is based on the outlook for air transport and federal administration where the vast majority of aircraft mechanics are employed. A large number of replacement openings are also expected over this period given the large number of aircraft mechanics approaching retirement age. Of the total job openings expected by 1995, replacement openings are expected to exceed new positions by a two to one margin.

Most aircraft mechanics enjoy stable year-round employment although a small percentage of positions may be seasonal as unemployment levels rise slightly during the winter months. The occupation is not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in the occupation is well below the provincial labour market average. This suggests there are relatively few experienced aircraft mechanics presently unemployed in the province.

1985 Annual Earnings

Lowest 10% of Workers	$ 17,283 or less
Average Worker	$ 30,477
Highest 10% of Workers	$ 43,455 or more

Source: 1986 Census

Industrial, Farm and Construction Machinery Mechanics and Repairers

8584

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,809	0.5	2.7	414
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	270	47
Grand Falls	240	29
Stephenville	75	17
Corner Brook	215	20
Labrador	440	1
Harbour Grace	55	13
Clarenville	40	12
Marystown	70	8
Gander	60	6

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	14	76	10	99	1
	1986	100	0	6	84	10	95	5
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Mining (32)
- Metals (27)
- Non-Metals (3)
- Quarries (1)

Manufacturing (26)
- Pulp and Paper (12)
- Food & Beverage (9)
- Non-Metallic Minerals (2)

Transport, Communications & Utilities (16)
- Miscellaneous Transport (7)
- Electric Power (5)
- Truck Transport (2)

Industrial, Farm and Construction Machinery Mechanics and Repairers

8584

Job Environment

The most important occupation in this group is the millwright, who installs and repairs industrial equipment on the plant floor. Following blueprints and using precision tools, millwrights, assemble, repair and maintain machinery operated by hydraulic, pneumatic, electronic or other means. Millwrights may be employed in construction where the work is on a project-by-project basis, or in plants where employment involved with maintenance and repair is on a continuous basis. Both of these environments subject millwrights to various hazards including noise.

Other occupations within this group include heavy equipment and diesel mechanics.

For industrial mechanics not engaged in contract construction, the work week is normally 35 to 40 hours longs, with occasional overtime. Shift work is common.

Training and Qualifications

Training for these occupations takes place through an apprenticeship program. The Cabot Institute, the Fisher Institute and several community colleges around the province offer programs in industrial mechanics, heavy duty repair, or heavy equipment repair. These programs range in duration from nine to ten months. Graduates of these programs are qualified as apprentices. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing interprovincial journeyperson's examinations. As an alternative one can complete four years of on-the-job training combined with four periods of in-school instruction. Nine-month programs in diesel mechanics and marine diesel mechanics are also available in the province.

Nature of Supply

Over 70 percent of industrial mechanics in the province have completed some type of post-secondary education, usually a community college or trade school program. At the time of the 1986 Census the occupation was completely dominated by men. The percentage of young people in the occupation declined significantly between 1981 and 1986 to well below the labour force average. This may have been due to lack of job opportunities for new entrants to the occupation given the decline in employment which took place over this period. The proportion of older workers remained the same at just over the all-occupation average.

Industrial and heavy duty mechanics are employed in all regions of the province but the greatest concentration is in Labrador.

Job Prospects

Employment in these occupations declined by almost 25 percent between 1981 and 1986. Most of the decrease was attributable to the mining and pulp and paper industries. The number of mechanics employed in construction and transportation actually rose slightly. The situation improved somewhat in the latter half of the 1980s and growth for the decade as a whole is estimated to have been positive but below average. Prospects should improve in the 1990s as employment is expected to expand at a slightly faster than average pace over the next five years. This view is based on the outlook for a broad range of industries which employ industrial and heavy equipment mechanics, however, most job opportunities are expected to arise in the transportation and construction sectors. The Hibernia development will employ 70 to 90 industrial mechanics during peak construction periods. A large number of replacement openings are also expected by 1995 given the number of mechanics approaching retirement age. Almost half the job opportunities that arise by 1995 are expected to come from this source.

For the most part, these occupations offer year-round employment although some positions, particularly in the construction sector, may be seasonal. The occupations are also somewhat sensitive to fluctuations in economic conditions. Some job losses could occur in mining, manufacturing, and construction during sustained economic slowdowns. The number of U.I. beneficiaries relative to employment in these occupations is well below the provincial labour market average. The U.I. beneficiaries are divided equally between industrial mechanics (millwrights) and heavy duty equipment mechanics.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,545 or less
Average Worker	$ 31,546
Highest 10% of Workers	$ 43,017 or more

Source: 1986 Census

Business and Commercial Machine Mechanics and Repairers 8585

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	141	3.2	2.2	22
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	100	1
Grand Falls	0	0
Stephenville	0	0
Corner Brook	15	1
Labrador	0	0
Harbour Grace	5	0
Clarenville	0	0
Marystown	0	0
Gander	5	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	21	79	0	97	3
	1986	92	8	11	85	4	89	11
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (44)
- Wholesale (39)
- Retail (4)

Manufacturing (26)
- Electrical Products (22)
- Food and Beverage (4)

Services (22)
- Business (13)
- Miscellaneous (9)

Business and Commercial Machine Mechanics and Repairers 8585

Job Environment

These occupations are responsible for the repair and maintenance of office machines. This involves disassembling the piece of equipment, replacing broken parts, making adjustments and reassembling. Office machine repairers also inspect equipment during routine maintenance calls. The nature of the work involves travelling from one location to another. More extensive repairs may be done at a central repair shop by highly qualified repairmen. A work week usually is composed of five days, 35-40 hours.

Training and Qualifications

New entrants into these occupations usually undertake company sponsored training programs in combination with a period of on-the-job training. Employment prospects would be greatly enhanced with the completion of a community college program in electronics technology. The Marine Institute, the Cabot Institute and the Fisher Institute each offer three-year programs in electronics engineering technology.

Nature of Supply

Most people in these occupations have completed a community college or institute of technology program. While this area continues to be dominated by men, women had increased their share of employment to 8 percent by 1986. The proportion of young people declined to well below the average for all occupations in the early 1980s. This may have been caused by a lack of job opportunities given the decline in employment over this period. The percentage of older workers was also below average, reflecting the relatively recent emergence of this occupation in the province. Most people in these occupations reside in the St. John's area.

Job Prospects

Employment in these occupations declined by 10 percent between 1981 and 1986, but the situation improved in the latter half of the 1980s and growth for the decade as a whole is estimated to have been above average. Employment is expected to expand at the average rate for all occupations over the next five years. This view is based on the outlook for wholesale trade, electrical products, and components of the service sector where these occupations are concentrated. Relatively few replacement openings are expected over this period, however, given the relatively young average age of people employed in this occupational area.

Business machine repairers enjoy stable year-round employment and are not affected by fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 24,548
Highest 10% of Workers	N/A

Source: 1986 Census

Precision Instrument Mechanics and Repairers 8588

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	45	4.6	14.2	35
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	30	1
Grand Falls	0	0
Stephenville	5	0
Corner Brook	0	2
Labrador	0	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	1
Gander	0	0

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	100	0
	1986	100	0	11	67	22	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (43)
- Wholesale (43)

Manufacturing (29)
- Food and Beverage (14)
- Miscellaneous (14)

Services (14)
- Business (14)

Precision Instrument Mechanics and Repairers 8588

Job Environment

This occupation includes aircraft-instrument mechanics, camera repairers, gyroscopic-instrument mechanics and surgical instrument repairers. These people repair, overhaul, and calibrate various precision devices used to measure and record such characteristics as temperature and density in the control or automation of industrial processes. Their work involves installing instruments in control panels and aircraft and connecting them to hydraulic, pneumatic and electrical lines; calibrating instruments for accuracy; inspecting and testing instruments to isolate faults; and disassembling, cleaning, replacing parts and reassembling instruments. Most instrument establishments are clean, well-lit and often air-conditioned. However, technicians who service instruments that control manufacturing processes may be exposed to noisy, dusty or warm conditions. A five-day work week of 35 to 40 hours is normal. Some shift work and overtime, including evenings and weekends, may be necessary.

Training and Qualifications

Training for instrumentation technicians takes place through an apprenticeship program. The Marine Institute offers a nine-month program in industrial instrumentation. Graduates of this program are qualified as apprentice instrument mechanics. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing interprovincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training combined with four periods of in-school instruction.

Nature of Supply

All the precision instrument mechanics in the province have completed a community college or institute of technology program in a related field. At the time of the 1986 Census the occupation consisted entirely of men. The percentage of young people increased significantly in the early 1980s but remained below the average for all occupations. The increase in the number of new entrants to the occupation is consistent with the attractive labour market facing precision instrument mechanics at that time. The percentage of older workers in the occupation was almost three times higher than the overall labour force average which suggests that many are approaching retirement. Most precision instrument mechanics reside in the St. John's area.

Job Prospects

Employment in this occupation increased by 50 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been considerably higher than average. Despite this, the occupation remains relatively small with fewer than 50 people employed in the province. Job prospects will continue to be favourable in the 1990s and employment expansion to 1995 will be dramatically higher than average. The Hibernia project will directly employ 50 to 60 instrumentation mechanics during various periods of the development. A number of replacement openings are also expected over the next five years.

For the most part, these occupations enjoy stable year-round employment, although a small percentage of jobs in this province are seasonal. Instrument mechanics are not significantly affected by fluctuations in economic activity, though some may be employed on a project-by-project basis. The number of U.I. beneficiaries relative to employment in the occupation is well below the provincial labour market average. This suggests that there are very few experienced instrumentation technicians presently unemployed in the province.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 23,918
Highest 10% of Workers	N/A

Source: 1986 Census

Other Mechanics and Repairers 8589

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	263	0.0	2.0	68
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	115	8
Grand Falls	20	1
Stephenville	5	4
Corner Brook	45	3
Labrador	15	0
Harbour Grace	15	2
Clarenville	5	2
Marystown	10	4
Gander	20	6

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	22	60	18	88	12
	1986	100	0	22	73	5	91	9
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Trade (49)
- Retail (34)
- Wholesale (15)

Services (15)
- Recreation (6)
- Education (4)
- Miscellaneous (4)

Public Administration (13)
- Federal (9)
- Local (4)

Other Mechanics and Repairers 8589

Job Environment

Occupations in this category include gas pump servicers, vending machine servicers, oil burner mechanics, locksmiths, gunsmiths, and mechanics who repair small gasoline-powered motors such as lawn mowers, snowblowers, chainsaws and outboard motors. A five-day work week of 35 to 40 hours is normal, although being on call is common, especially for home-heating furnace repairers.

Training and Qualifications

For some of the occupations in this group, training takes place through an apprenticeship program. The Avalon Community College offers a nine-month program in furnace installation and repair. Several community colleges offer nine-month programs in small equipment repair. Graduates of these programs are qualified as apprentices. Having worked in the trade, apprentices can complete two additional periods of formal training prior to writing journeyperson's examinations. As an alternative, one could complete three years of on-the-job training combined with three periods of in-school instruction. Training for other occupations in this category usually takes place on the job.

Nature of Supply

Many people in these occupations have no formal post-secondary education. Roughly 30 percent have completed a community college or institute of technology program. At the time of the 1986 Census the occupations consisted entirely of men. The proportion of young people was equal to the average for all occupations, while the proportion of older workers declined dramatically compared to 1981. People in this occupational group are employed in all regions of the province.

Job Prospects

Employment in these occupations declined slightly between 1981 and 1986 and growth for the decade as a whole was well below average. Employment is expected to expand at about the average rate for all occupations over the next five years. This view is based on the outlook for retail and wholesale trade, components of the service sector and public administration where most people in these occupations are employed. A large number of replacement openings are also expected over this period.

These occupations offer stable year-round employment and are not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in these occupations is below the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 14,766 or less
Average Worker	$ 23,662
Highest 10% of Workers	$ 34,615 or more

Source: 1986 Census

Marine Craft Fabricating, Assembling and Repairing Occupations 8592

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	347	-3.9	14.6	453
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	85	12
Grand Falls	30	3
Stephenville	25	0
Corner Brook	5	1
Labrador	0	0
Harbour Grace	20	2
Clarenville	15	10
Marystown	80	15
Gander	10	6

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	19	62	19	95	5
	1986	100	0	8	74	18	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (82)
- Shipbuilding (38)
- Transport Equipment (22)
- Food and Beverage (13)

Transport, Communications & Utilities (9)
- Water Transport (7)

Fishing (6)

Marine Craft Fabricating, Assembling and Repairing Occupations 8592

Job Environment

Marine mechanic, ship carpenter, ship fitter and shipwright are typical occupations in this group. Marine craft fabricators build and repair ships and other marine crafts and fittings. In the construction of a wooden boat, for example, workers cut and form parts, such as keels, stems, stern posts, ribs and sidings. They also build and install structures such as mountings for machinery, shafting and propeller supports, pilot houses, cabins, rudders, decking, mast booms and ladders. The construction of metal boats requires metal working skills. Working conditions in this occupation are difficult, and include exposure to dampness, noise, vibration and hazardous materials which require the use of safety equipment.

Training and Qualifications

The training required for these occupations varies according to the type of marine craft being built or repaired. Community college programs that emphasize welding, machining, pipefitting and marine engineering provide the basic preparation for entry into these occupations. The Marine Institute offers the following marine related courses: marine diesel mechanics, (9 months); marine electrical practice, (9 months); marine electronics, (2 years); marine steelwork, (9 months); marine engineering, (3 years). The Institute also offers short courses in boat building and boat repair.

Nature of Supply

Employment in these occupations is divided equally between those who have completed a post-secondary program of study and those who have not. At the time of the 1986 Census these occupations were entirely dominated by men. The percentage of young people in the occupations declined dramatically between 1981 and 1986 to well below the average for all occupations. This was caused by a lack of job opportunities for new entrants to the occupations given the decline in employment that took place over this period. The proportion of older workers in these occupations is over twice as high as the all-occupation average. Marine craft fabricators are employed in most regions of the province.

Job Prospects

Employment in these occupations declined by almost 50 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Prospects should improve considerably in the 1990s, however. The Hibernia development and related activity is expected to generate increased activity at the province's two largest shipyards in Marystown and St. John's. Subsequent offshore oil developments or increased levels of exploration activity would also provide a boost to this sector. As such, these occupations should experience above average growth over the next five years. A significant number of replacement positions are also expected over this period given the large number of marine fabricators approaching retirement age.

These occupations are not affected by seasonal factors, but are sensitive to fluctuations in economic conditions in general and to volume of new vessel construction and vessel repair work in particular. As such, periods of unemployment can be expected between major contracts when shipyard activity is at a low. The number of U.I. beneficiaries relative to employment in these occupations is slightly higher than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 7,717 or less
Average Worker	$ 22,938
Highest 10% of Workers	$ 32,716 or more

Source: 1986 Census

Excavating, Grading and Related Occupations 8711

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	1,450	-1.0	5.2	584
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	280	101
Grand Falls	145	43
Stephenville	110	48
Corner Brook	205	76
Labrador	215	19
Harbour Grace	100	24
Clarenville	90	30
Marystown	50	15
Gander	150	43

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	8	82	10	93	7
	1986	100	0	5	79	16	94	6
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (37)	Transport, Communications & Utilities (24)	Public Administration (16)
	- Miscellaneous Transport (16) - Air Transport (2) - Electric Power (2)	- Local (12) - Federal (2) - Provincial (2)

Excavating, Grading and Related Occupations 8711

Job Environment

This occupational group consists of the operators of various types of excavating and grading equipment, such as bulldozers, power shovels and dredging machines. In addition to operating machines, excavators are often required to do routine maintenance and minor repairs such as changing shovels, blades and other attachments. Local governments often employ equipment operators in winter months to remove snow from roads and airport runways. Other important types of work include operating open-pit mining equipment and maintaining marine facilities through dredging and pile driving.

This kind of work is carried out at building or road construction sites in all types of weather. It is done outdoors, sometimes in remote locations. People in construction work must often live in camps. The work offers some hazard from noise and vibration.

Training and Qualifications

Training for these occupations takes place through an apprenticeship program. The Western Community College offers a 24-week pre-employment program in heavy equipment operation.

Nature of Supply

Most people in these occupations have no formal post-secondary education, although one in five has completed a community college program. These occupations were entirely dominated by men at the time of the 1986 Census. The proportion of young people was considerably lower than the average for all occupations reflecting the fact that many people advance to these positions after several years of employment in labouring positions. The percentage of older workers in these occupations was twice the labour market average. This suggests that many of these workers will soon be approaching retirement. People employed in excavating, grading, and related occupations are employed in all regions of the province.

Job Prospects

Employment in these occupations declined by over 15 percent between 1981 and 1986 and growth for the decade as a whole is estimated to have been negative. Job prospects should improve significantly in the 1990s as employment is expected to expand at a faster than average pace to 1995. This view is based on the outlook for construction, transportation, and public administration, where most people in these occupations are employed. A significant number of replacement openings are also expected over this period given the high percentage of these workers approaching retirement age.

Employment in these occupations is highly seasonal with unemployment levels rising during the winter months when construction activity is at a low. Employment is also sensitive to fluctuations in economic conditions in general and the level of construction activity in particular. Job opportunities may be scarce during economic slowdowns. The number of U.I. beneficiaries relative to employment in these occupations is slightly higher than the provincial labour market average. Beneficiary levels are typically three times higher during the winter months.

1985 Annual Earnings

Lowest 10% of Workers	$ 17,412 or less
Average Worker	$ 25,539
Highest 10% of Workers	$ 38,521 or more

Source: 1986 Census

Electrical Power Line Workers and Related Occupations 8731

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	563	4.6	0.0	30
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	100	5
Grand Falls	70	2
Stephenville	15	4
Corner Brook	55	1
Labrador	75	0
Harbour Grace	50	0
Clarenville	20	0
Marystown	30	2
Gander	45	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	22	78	0	98	2
	1986	100	0	7	92	1	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communication & Utilities (92)
- Electric Power (86)
- Telecommunications (4)
- Radio & TV Broadcasting (2)

Mining (3)
- Metals

Trade (2)
- Wholesale (1)
- Retail (1)

Electrical Power Line Workers and Related Occupations 8731

Job Environment

People in this classification construct and maintain power lines used for both long-distance and local electrical transmission or distribution. Linemen/women, service linemen/women, repair linemen/women and cablemen/women are included in this category.

Linemen/women are employed in several settings. They erect high-voltage transmission lines leading from electricity generating sites to localities where the electricity is to be used. They construct support towers, install insulators and other equipment, and string transmission lines. Construction linemen/women move from project to project, and often work in remote areas.

Linemen/women are usually employed by utility companies or by contractors. Construction linemen/women who are union members obtain work through the union on a rotating basis. Periods of unemployment between projects may occur for construction linemen/women.

Repair and service linemen/women are on call at most times and may work for long periods especially during emergency conditions, as for example, after major storms. Cablemen/women are employed to repair and install underground or underwater electrical lines. Like linemen/women, they may be called upon to perform emergency work.

Training and Qualifications

Training for these occupations takes place through apprenticeship programs. Several community colleges in the province offer nine-month pre-employment programs in electrical power utilities. Graduates of these programs are apprenticed linemen/women. Having worked in the trade, apprentices can complete additional periods of formal training, prior to writing journeyperson's examinations. As an alternative, operating linemen/women can complete four years of on-the-job training (three years for construction linemen/women) in combination with four periods of in-school instruction (three periods for construction linemen/women).

Nature of Supply

Most people in this occupation have completed a community college or trade school program. At the time of the 1986 Census, all power line workers in the province were men. The proportion of young people declined significantly between 1981 and 1986 to well below the labour market average. This is surprising, given an increase in employment over this period. The number of older workers was well below average, reflecting the physical demands of the occupation. Electrical power line workers are employed in all regions of the province.

Job Prospects

Employment in this occupation increased by over 25 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been well above average. Slower than average employment growth is expected in the first half of the 1990s, based on the outlook for electric power industry where the vast majority of these workers are employed. However, should a proposed transmission line be built between Labrador and the island portion of the province over the forecast period, employment in the occupation would increase considerably. Relatively few replacement openings are expected over the next five years.

Most power line workers are employed on a year-round basis. The occupation is not affected by fluctuations in economic activity but employment levels rise with the construction of new hydro electric developments. The number of U.I. beneficiaries relative to employment in the occupation is considerably lower than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 24,022 or less
Average Worker	$ 29,513
Highest 10% of Workers	$ 36,105 or more

Source: 1986 Census

Construction Electricians and Repairers 8733

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	994	1.6	4.8	358
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	300	164
Grand Falls	50	27
Stephenville	25	18
Corner Brook	95	49
Labrador	170	7
Harbour Grace	45	33
Clarenville	35	20
Marystown	55	18
Gander	60	20

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	24	72	4	91	9
	1986	100	0	13	80	7	90	10
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (48)

Manufacturing (18)
- Pulp and Paper (9)
- Food and Beverage (7)
- Shipbuilding (1)

Mining (13)
- Metals (13)

Construction Electricians and Repairers 8733

Job Environment

Construction electricians install and repair wiring in buildings and other structures and install switches, conduits, circuit breakers, lighting and other apparatus. They work on nearly all types of construction, from housing to factories to road building, either as employees or as contractors. Electricians who are members of a union usually work out of a hiring hall, where work is allocated on a rotating basis. Much electrical work is done in a standing position, often in confined spaces. Risks involved include falling from a height or receiving an electrical shock; work is often indoors, although it is sometimes outside in poor weather.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. Several community colleges around the province offer nine-month pre-employment programs in basic electrical. Graduates of these programs are qualified as apprenticed electricians. Having worked in the trade apprentices can complete three additional periods of formal training prior to writing inter-provincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction.

Nature of Supply

Over 80 percent of construction electricians in the province have completed a community college or trade school program. The occupation was completely dominated by men at the time of the 1986 Census. The proportion of young people declined significantly between 1981 and 1986, reflecting a lack of job opportunities for new entrants into the occupation. The percentage of older workers was equal to the average for all occupations. Construction electricians are employed in all areas of the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986. Growth for the decade as a whole was estimated to have been about average. Job prospects should improve considerably in the 1990s. Employment is expected to expand at a faster than average pace over the next five years. This view is based on the outlook for a broad range of industries which employ construction electricians, most notably the construction industry, manufacturing, and mining. The Hibernia development alone will require between 175 to 225 electricians during peak construction periods. A number of replacement openings are also expected over this period, given the number of electricians approaching retirement age.

Many electricians are employed on a seasonal basis with unemployment levels rising during the winter months when construction activity is at a low. However, since some electricians are employed in maintenance positions, the occupation is less affected by seasonal factors than most other construction trades. The occupation is also affected by fluctuations in economic conditions in as much as the level of construction activity is affected. Periods of unemployment can be expected between construction projects. The number of U.I. beneficiaries relative to employment in the occupation is considerably higher than the provincial labour market average. Typically, beneficiary levels during the winter months are twice the level shown here.

1985 Annual Earnings

Lowest 10% of Workers	$ 16,064 or less
Average Worker	$ 29,577
Highest 10% of Workers	$ 41,917 or more

Source: 1986 Census

Wire Communications and Related Equipment Installing and Repairing Occupations

8735

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	589	0.8	1.3	91
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	260	9
Grand Falls	55	1
Stephenville	15	3
Corner Brook	45	2
Labrador	35	1
Harbour Grace	35	3
Clarenville	5	3
Marystown	15	0
Gander	45	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	6	80	14	99	1
	1986	97	3	11	82	7	97	3
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (86)
- Telecommunications (74)
- Radio & TV Broadcasting (8)
- Electric Power (5)

Manufacturing (6)
- Electrical Products (3)
- Chemicals (2)
- Pulp and Paper (1)

Services (4)
- Business (3)
- Education (1)

Wire Communications and Related Equipment Installing Installing and Repairing Occupations 8735

Job Environment

Occupations in this group deal with the installation, repair and maintenance of all types of wire communications equipment, including installation of telephone lines, maintenance of telephone switching systems at central locations, maintenance of special systems for the transmission of computerized data, and installation of telephones, cable TV lines and burglar alarms in private residences and commercial buildings. Although there is a trend towards pre-wired buildings, much work still consists of upgrading wiring in existing buildings. New equipment installed in large commercial buildings is now often repaired at a central facility, rather than on-site. Some of the titles in this classification include telephone technician, wire installer, burglar-alarm installer and switchboard repairer.

The working conditions for this group vary greatly, depending on the nature of the position. Line installers work outdoors, often in inclement weather (especially in the case of emergencies), installing poles and lines. When services are underground, line installers must work in very cramped quarters fishing wires through small passageways. Other workers install or repair equipment in commercial buildings and private houses.

Wiring technicians work regular hours, but they may be on call 24 hours a day for emergency repairs, which can result in long hours for the technician.

Training and Qualifications

Training requirements for these occupations vary depending on the employer. Telephone service technicians should have a two- or three-year program in electronics. Line installers should complete a pre-employment program in electric power utilities. Cable TV installers should have completed a basic electrical/electronics program while cable line installers should have completed a linesperson climbing course or have related experience. The Cabot Institute, the Marine Institute and the Fisher Institute offer three-year programs in electronics engineering technology. Various community colleges around the province offer nine-month programs in electrical power utilities/operating linemen/women.

Nature of Supply

Just over half the people employed in these occupations have completed a community college or institute of technology program. The vast majority are men. Women accounted for just 3 percent of employment at the time of the 1986 Census. Although the percentage of young people in the occupation increased significantly between 1981 and 1986, it was still well below the average for all occupations. The proportion of older workers declined over the period to equal the all-occupation average. About half the workers in these occupations reside in the St. John's area.

Job Prospects

Employment in these occupations increased by 15 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been slightly below average. While job prospects should improve somewhat over the next five years, employment growth is expected to remain below average. This view is based on the outlook for the communications industry, where most of these workers are employed. A significant number of replacement openings are expected over this period given the percentage of these workers approaching retirement.

Most people in these occupations enjoy stable year-round employment and are not effected by fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries relative to employment in the occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 20,023 or less
Average Worker	$ 27,983
Highest 10% of Workers	$ 40,148 or more

Source: 1986 Census

Carpenters and Related Occupations 8781

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	3,388	0.8	5.5	1,707
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	920	524
Grand Falls	315	178
Stephenville	175	123
Corner Brook	325	187
Labrador	145	74
Harbour Grace	410	290
Clarenville	240	148
Marystown	140	92
Gander	340	233

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	99	1	14	66	20	91	9
	1986	98	2	15	70	15	87	13
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (50)

Services (13)
- Miscellaneous (7)
- Personal (2)
- Education (2)

Public Administration (13)
- Local (6)
- Provincial (5)
- Federal (3)

Carpenters and Related Occupations

8781

Job Environment

The carpentry occupations include carpenters, joiners, framers, form builders, maintenance carpenters, and others involved in the construction, renovation and maintenance of wooden structures. They are among the most numerous of skilled construction tradespeople, finding employment in all classes of construction. Carpenters have traditionally worked with wood, but in modern construction they also work with plastics, metal and other materials. Rough carpentry involves construction of forms, erection of building frames and other work associated with the assembly of basic structures, while finish carpentry is concerned with the final stages of construction, such as the installation of doors, mouldings, and stairs. Fully trained carpenters can do both rough and finish carpentry, but many choose to specialize; carpenters in rural regions are likely to practice all of their skills, while those living in urban areas may specialize in, for example, house framing or stair construction.

Carpenters can work as employees or as independent contractors; in both cases, they usually work on a project-by-project basis. When construction activity is slow they may experience unemployment. Members of construction unions usually work out of union hiring halls, where work is allocated to members on a rotating basis. Some carpenters work as maintenance personnel for 35 to 40 hours per week and experience more stable employment patterns than those in the construction industry.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. Several community colleges around the province offer nine-month pre-employment programs in carpentry. Graduates of these programs are qualified as apprenticed carpenters. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing interprovincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction.

Nature of Supply

Many carpenters in the province have no formal post-secondary education, although 30 percent have completed a community college program. The occupation continues to be dominated by men. Women represented just 2 percent of employment at the time of the 1986 Census. The percentage of young people in the occupation was slightly less than the average for all occupations. The proportion of older workers was twice the labour market average, despite a significant decline between 1981 and 1986. This suggests that many carpenters may be approaching retirement age. Carpenters are employed in significant numbers in all areas of the province.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986 and growth for the decade as a whole is estimated to have been below average. Job prospects should improve considerably in the first half of the 1990s as employment is expected to expand at a considerably faster than average pace over the next five years. This view is based on the outlook for a broad range of industries which employ carpenters, the largest being construction, the service sector and public administration. The Hibernia project alone will employ in excess of 100 carpenters during peak construction periods. A significant number of replacement openings are also expected by 1995, given the large percentage of carpenters approaching retirement age.

Many carpenters are employed on a seasonal basis with unemployment levels rising during the winter months when construction activity is at a low. Some carpenters employed in maintenance positions would enjoy more stable year-round employment. The occupation is also affected by fluctuations in economic conditions, particularly if the level of construction activity is affected. Periods of unemployment can be expected between construction projects. The number of U.I. beneficiaries relative to employment in the occupation is considerably higher than the provincial labour market average. The number of carpenters receiving benefit during winter months is more than double the level shown here.

1985 Annual Earnings

Lowest 10% of Workers	$ 12,181 or less
Average Worker	$ 22,137
Highest 10% of Workers	$ 33,757 or more

Source: 1986 Census

Brick and Stone Masons and Tile Setters 8782

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	277	2.4	6.0	148
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	130	44
Grand Falls	5	5
Stephenville	0	8
Corner Brook	30	9
Labrador	15	0
Harbour Grace	30	16
Clarenville	5	9
Marystown	0	2
Gander	25	15

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	11	80	9	90	10
	1986	100	0	18	71	11	82	18
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (79)	Trade (6) - Wholesale (4) - Retail (2)	Public Administration (4) - Local (4)

Brick and Stone Masons and Tile Setters 8782

Job Environment
This occupational group includes the masonry trades, which are concerned with preparing and laying brick, block, stone, tile, refractory brick and similar materials. In addition to their building activities, masons read and interpret plans, take measurements and lay out their work. Masons work in a variety of settings involving new or renovation construction. They are often employed on a project-by-project basis, either as employees or as independent contractors. Masons who are members of construction union locals usually work out of a union hiring hall where work is allotted on a rotating basis.

Training and Qualifications
Training for bricklayers and masons takes place through an apprenticeship program. The Cabot Institute and the Fisher Institute offer pre-employment programs in bricklaying ranging in duration from nine to ten months. Graduates of these programs are qualified as apprentice bricklayers. Having worked in the trade, apprentices can undertake three additional periods of formal training prior to writing interprovincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction.

Tilesetting is not an apprenticeable trade in this province. Training traditionally takes place on the job under the supervision of an experienced tilesetter. Formal training is not available in Newfoundland but is offered in some provinces.

Nature of Supply
Over half of the masons and tilesetters in the province have no post-secondary education, although 40 percent have completed a community college program. Men completely dominated this occupational area at the time of the 1986 Census. The proportion of young people in this group increased considerably in the early 1980's but was still slightly lower than the percentage of young people in the workforce as a whole. The proportion of older workers in these trades was slightly higher than average for all occupations. Hence, a significant number of masons will soon be approaching retirement age. Over half the masons and tilesetters in the province reside in the St. John's area.

Job Prospects
Employment in these occupations increased slightly between 1981 and 1986, and growth for the decade as a whole is estimated to have been above average. Employment growth should continue to be well above average over the next five years, based on the outlook for the construction industry where the vast majority of masons and tilesetters are employed. Given the relatively high proportion of older workers in these occupations, a significant number of replacement openings are also expected over this period.

Many masons and tilesetters are employed on a seasonal basis. Unemployment levels rise during the winter months when construction activity slows. These occupations are also sensitive to fluctuations in economic conditions, particularly if the level of construction activity is affected. Job opportunities may be scarce during periods of economic recession. The number of U.I. beneficiaries relative to employment in these occupations is considerably higher than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 29,238
Highest 10% of Workers	N/A

Source: 1986 Census

Plasterers and Related Occupations 8784

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	135	-0.2	7.0	66
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	60	20
Grand Falls	0	4
Stephenville	5	3
Corner Brook	10	7
Labrador	0	0
Harbour Grace	10	13
Clarenville	10	9
Marystown	0	2
Gander	15	26

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	16	84	0	87	13
	1986	100	0	7	89	4	75	25
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (91)	Services (4) - Hospitals (4)	Public Administration (4) - Provincial (4)

Plasterers and Related Occupations 8784

Job Environment

This occupational grouping encompasses plasterers, lathers, drywall installers and tapers. Plasterers apply plaster, stucco and other materials to building surfaces. The materials are usually in the form of a slurry, which is applied and then given the appropriate texture. Lathers fasten metal, wood or gypsum lath to structural surfaces to provide a base for plaster or other materials. Sometimes they build complex-shaped frames for cornices or other ornamental shapes for buildings. Drywall installers trim and attach drywall, a commercial material used widely in place of plastered walls. After drywall is applied, it must be finished by applying tape or other material over corners and the joints between the sheets and then sanded to prepare for final finishing.

Workers in these trades are employed in a variety of construction settings, residential and non-residential, union and non-union, as employees and as independent contractors. Except for the application of stucco plastering, all drywall and plastering is done indoors, frequently in dusty, poorly lit conditions.

Training and Qualifications

There are no formal courses one can take to prepare for these occupations. Training usually takes place on the job under the supervision of an experienced worker.

Nature of Supply

The vast majority of plasterers in the province have no formal post-secondary education. For most, training in the trade was acquired on the job. The proportion of young people in this occupation declined significantly in the early 1980's to well below the share of young people in the workforce as a whole. This may be related to a lack of job opportunities for new entrants to the occupation during this period. The percentage of older workers in the occupation increased but was still below the average for all occupations. About half the plasterers in the province reside in the St. John's area.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Prospects should improve considerably in the 1990's as employment growth is expected to be well above average over the next five years. This view is based on the outlook for the construction industry, where over 90 percent of plasterers in the province are employed. A number of replacement openings are also expected over this period.

Employment in these occupations tends to be seasonal, with employment levels rising during the winter months when construction activity slows. However, since most of this work is done indoors, seasonal fluctuations may not be as severe as in other construction trades. The occupations are also sensitive to fluctuations in economic conditions. Job opportunities may be scarce during economic recessions when construction activity is reduced. The number of U.I. beneficiaries relative to employment in the occupation is considerably higher than the average for all occupations. Beneficiary levels during the winter months are typically twice as high as shown here. Generally speaking, two-thirds of the beneficiaries in this group are plasterers and one-third are drywall installers.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 21,267
Highest 10% of Workers	N/A

Source: 1986 Census

Painters, Paperhangers and Related Occupations 8785

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	507	4.1	5.4	269
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	170	70
Grand Falls	25	26
Stephenville	15	11
Corner Brook	30	25
Labrador	30	9
Harbour Grace	60	26
Clarenville	20	6
Marystown	25	13
Gander	80	25

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	89	11	24	63	13	86	14
	1986	90	10	27	63	10	83	17
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (53)

Services (18)
- Miscellaneous (8)
- Recreation (3)
- Hospitals (2)

Public Administration (15)
- Provincial (11)
- Local (2)

Painters, Paperhangers and Related Occupations

8785

Job Environment

People in the painting and decorating trade apply paint, wallpaper and fabrics to walls and ceilings. They work in many types of construction projects, as well as in buildings maintenance and renovation.

Painters first prepare surfaces by sanding or removing old paint or wallpaper and repairing old plaster and defective woodwork. Next, they lay protective sheeting over exposed floors or other surfaces that are not to be painted. After preparing paint and equipment, they apply the paint by brush, roll or spray. Painters must stand, bend and crouch for long periods and work at heights. While heavy lifting is not common, painters must move ladders and paint containers.

Employment is usually on a project-to-project basis. Painters often work as self-employed contractors or as members of a construction union receiving work from a union hiring hall on a rotating basis. Painters may also be employed on a permanent basis to maintain buildings or other large structures.

Training and Qualifications

Training for this occupation takes place through an apprenticeship program. Apprentices must complete three years of on-the-job training in combination with three periods of in-school instruction prior to writing journeyperson's examinations.

Nature of Supply

Most people in this occupation received their training on the job. Very few painters in the province have completed a post-secondary training program. The occupation continues to be dominated by men. They accounted for nine out of ten jobs in this occupational area at the time of the 1986 Census. The percentage of young people in the trade was well above the average for all occupations. The proportion of older workers declined slightly in the early 1980's to approach the all-occupation average. Painters and related workers are employed in all areas of the province.

Job Prospects

Employment in these occupations increased by over 25 percent between 1981 and 1986, and growth for the decade as a whole was well above average. Growth should remain strong into the 1990's as employment is expected to expand at a faster than average pace over the next five years. This view is based on the outlook for the construction industry, components of the service sector, and public administration where most of the painters in the province are employed. A significant number of replacement openings are also expected over this period given the number of workers in this occupational group approaching retirement age.

Employment in these occupations is somewhat seasonal with unemployment levels rising during the winter months when construction activity slows. However, since many painters are employed in maintenance positions in industries other than construction, seasonality is less pronounced than in most other trades. The occupation is also sensitive to fluctuations in economic conditions should the level of construction activity be affected. The number of U.I. beneficiaries relative to employment in the occupation is considerably higher than the provincial labour market average. Beneficiary levels during the winter months are typically twice as high as shown here.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 22,737
Highest 10% of Workers	N/A

Source: 1986 Census

Pipefitting, Plumbing and Related Occupations 8791

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	566	-3.1	5.3	229
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	220	77
Grand Falls	55	16
Stephenville	35	15
Corner Brook	45	20
Labrador	50	4
Harbour Grace	55	21
Clarenville	0	16
Marystown	10	6
Gander	30	16

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	17	71	11	92	8
	1986	99	1	10	82	8	88	12
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (51)	Manufacturing (15)	Public Administration (14)
	- Pulp and Paper (11)	- Local (8)
	- Food & Beverage (3)	- Federal (5)
		- Provincial (1)

Pipefitting, Plumbing and Related Occupations 8791

Job Environment

This occupational group includes workers in the piping trades – plumbers, pipefitters, steamfitters, gasfitters and sprinkler fitters. While all these trades concern the installation and repair of piping systems, each has a different focus. Plumbers generally work in a residential or commercial setting; pipefitters work at industrial applications; steamfitters and gasfitters work on piping with special needs; sprinkler fitters install sprinkler systems in buildings for fire protection. Much of the work is on residential and commercial maintenance, and on construction projects.

People in these occupations must understand and interpret detailed plans. They cut and shape pipes, install fittings and supports, and modify structures to accommodate their work. They use a wide range of hand and power tools, torches and welding equipment. By acquiring peripheral skills, such as general welding skills or a basic knowledge of electricity, they often improve their employability. Working conditions in the piping trades are often cramped and uncomfortable, and may require working at considerable heights; minor injuries are not uncommon. Most piping tradespeople are employed by contractors or builders on a project-to-project basis.

Training and Qualifications

Training for these occupations takes place through apprenticeship programs. Several community colleges around the province offer nine-month pre-employment programs in steamfitting/pipefitting. A ten-month pre-employment program in plumbing and domestic heating is available at the Cabot Institute. Graduates of these programs are qualified as apprenticed plumbers or pipefitters. Having worked in the trade, apprentices can complete three additional periods of formal training prior to writing interprovincial journeyperson's examinations. As an alternative, one can complete four years of on-the-job training in combination with four periods of in-school instruction.

Nature of Supply

Approximately 70 percent of pipefitters and plumbers in the province have completed a community college or trade school program. This occupational group is dominated by men; women accounted for just one percent of employment at the time of the 1986 Census. The percentage of young people in these trades declined significantly in the early 1980's to well below the average for all occupations. This is not surprising given the lack of job opportunities for new entrants to the occupation during this period. The proportion of older workers was equal to the all-occupation average. The largest concentration of pipefitters and plumbers is in the St. John's area.

Job Prospects

Employment in these occupations declined by over 30 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Prospects should improve considerably in the 1990's as employment is expected to expand at a much faster pace than the overall average. This view is based on the outlook for construction, manufacturing, and public administration, where most people in these occupations are employed. Most of the increase is expected to occur in the construction industry. The Hibernia project alone will require between 300 and 350 pipefitters during peak construction periods. A number of replacement openings are also expected over this period.

Many pipefitters and plumbers are employed on a seasonal basis, with employment levels rising during the winter months when construction activity slows. These occupations are also sensitive to fluctuations in economic conditions, particularly if the level of construction activity is affected. The number of U.I. beneficiaries relative to employment in these occupations is higher than the provincial labour market average. Beneficiary levels typically double during the winter months, with pipefitters exceeding plumbers by a slight margin.

1985 Annual Earnings

Lowest 10% of Workers	$ 17,519 or less
Average Worker	$ 28,267
Highest 10% of Workers	$ 42,891 or more

Source: 1986 Census

Iron Workers or Structural Metal Erectors 8793

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	126	-1.2	29.0	334
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	60	72
Grand Falls	0	3
Stephenville	10	6
Corner Brook	15	13
Labrador	0	1
Harbour Grace	25	6
Clarenville	5	9
Marystown	10	8
Gander	0	8

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	22	78	0	94	6
	1986	100	0	10	83	7	76	24
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Construction (50)

Manufacturing (32)
- Metal Fabrication (14)
- Shipbuilding (9)
- Non-Metallic Minerals (9)

Trade (14)
- Wholesale (14)

IronWorker or Structural Metal Erectors 8793

Job Environment

Ironworkers fabricate and erect structural steel assemblies, such as the steel frames of buildings, bridges, and storage tanks. They also shape and assemble reinforcing rods used in the preparation of reinforced concrete.

In erecting steel assemblies, structural ironworkers work according to detailed plans. The work is generally broken into stages with separate teams performing each function. As a job progresses, any one team member may perform all phases of the work on a rotating basis. Structural ironworkers perform many of their duties at heights, where there is considerable danger of falling or of being hurt by falling objects, and they are often exposed to adverse weather conditions. Reinforcing ironworkers construct the steel latticework around which concrete is poured, and this work can be heavy and dangerous.

Ironworkers work on a project-by-project basis and frequently travel long distances from job to job. Many are members of construction unions and work out of union hiring halls where work is allocated on a rotating basis.

Training and Qualifications

There are no formal courses one can take to prepare for these occupations. Training usually takes place on the job under the supervision of an experienced worker.

Nature of Supply

Most people in these occupations have no formal post-secondary education. At the time of the 1986 Census, the occupational group was entirely dominated by men. The proportion of young people in these trades declined in the early 1980's to well below the average for all occupations. This may have been related to a lack of job opportunities over this period. At the same time, the percentage of older workers in these trades increased to about the overall average. About half of these workers reside in the St. John's area.

Job Prospects

Employment in these occupations declined by 8 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Job prospects will improve dramatically in the 1990's. Employment growth is expected to be much faster than average over the next five years. Most of the improvement will be limited to rebar workers, however. The Hibernia project will require between 350 and 450 of these workers during peak construction periods. Employment levels can be expected to drop considerably once the project is completed.

Employment in these occupations is sensitive to economic fluctuations, particularly if the level of new construction activity is affected. Since most of these workers are employed on a project-by-project basis, unemployment levels tend to rise during the winter months when construction activity slows. Many ironworkers leave the province every year to work on projects in other parts of the country. The number of U.I. beneficiaries relative to employment in these occupations is considerably higher than the provincial labour market average. Most of these beneficiaries are ironworkers rather than rebar workers.

1985 Annual Earnings

Lowest 10% of Workers	N/A
Average Worker	$ 25,271
Highest 10% of Workers	N/A

Source: 1986 Census

Air Pilots, Navigators and Flight Engineers 9111

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	198	0.5	2.7	38
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	85	5
Grand Falls	5	1
Stephenville	5	0
Corner Brook	15	0
Labrador	35	2
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	0
Gander	10	1

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	0	100	0	92	8
	1986	94	6	18	82	0	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (88)
- Air Transport (81)
- Electric Power (3)
- Miscellaneous Transport (3)

Forestry (3)

Public Administration (3)
- Federal (3)

Air Pilots, Navigators and Flight Engineers

9111

Job Environment

This occupational group includes pilots-in-command, flight engineers, and helicopter pilots. Flight engineers operate and monitor the various electronic and mechanical systems on large aircraft. Pilots are responsible for the safe operation of aircraft, which requires such tasks as preparing flight plans, monitoring weather conditions and system functions, and checking the aircraft exterior. They must have a knowledge of meteorology, a working knowledge of aircraft engines, instruments and radio equipment, and navigation skills. Their job requires them to be away from home for days at a time.

Helicopter pilots can choose from a variety of jobs, including aerial photography, surveying, fire-ranging, crop dusting, marine rescue, and transportation of business executives and hospital patients. These pilots may work long, irregular hours.

Training and Qualifications

To become a pilot, one must obtain a commercial pilot's license and a radio-telephone operator's certificate before being licensed by Transport Canada. There are two ways to obtain a commercial pilot's license. One method requires the completion of a two- or three-year program in aviation technology. No such programs are offered in this province but are available in Ontario. The other method requires completion of an approved training program at a flying school. The Aviation Career Academy Ltd. offers training for a commercial pilot license for fixed wing aircraft. Training for a commercial helicopter pilot license is offered by Universal Helicopters Newfoundland Ltd.

Nature of Supply

Most people in these occupations have completed some form of post-secondary education. The vast majority of pilots in the province are men, although the percentage of women in this occupation had increased to 6 percent by 1986. The proportion of young people increased significantly between 1981 and 1986, but was still slightly below average. At the time of the 1986 Census, there were no older workers in these occupations. This suggests that many pilots either move on to administrative positions, more senior positions outside the province, or retire early in their careers. Most pilots in the province reside either in the St. John's area or in Labrador.

Job Prospects

Employment in this occupation showed very little change between 1981 and 1986, and growth for the decade as a whole is estimated to have been positive but below average. Employment growth is expected to be slightly faster than average over the next five years based on the outlook for the transportation, forestry, and public administration sectors, where most pilots in the province are employed. A number of replacement positions are also expected over this period.

Most pilots in the province fly fixed wing aircraft. At present, there are approximately 40 helicopter pilots employed in the province. Most pilots are employed on a year-round basis, although some positions, such as water bomber pilots or spray pilots, are employed on a seasonal basis. The occupation is also mildly sensitive to fluctuations in economic conditions. The number of U.I. beneficiaries relative to employment in the occupation is considerably lower than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 27,396 or less
Average Worker	$ 35,831
Highest 10% of Workers	$ 50,772 or more

Source: 1986 Census

Air Transport Operating Support Occupations

9113

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	415	-0.1	1.5	59
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	55	2
Grand Falls	5	0
Stephenville	15	0
Corner Brook	25	1
Labrador	55	0
Harbour Grace	0	0
Clarenville	0	0
Marystown	0	1
Gander	190	8

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	98	2	16	84	0	99	1
	1986	97	3	8	85	7	97	3
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (84)	Trade (12)	Public Administration (2)
- Air Transport (82)	- Wholesale (12)	- Federal (2)

Air Transport Operating Support Occupations 9113

Job Environment

This occupational group, which includes air traffic controllers, flight service specialists, flight dispatchers, crew schedulers, and airline radio operators, is responsible for aircraft ground support. This involves provision of flight services, control of aircraft movement, analysis and compilation of weather reports and other flight plan information, and radio communication with aircraft crews.

Training and Qualifications

Air traffic controllers and flight service specialists are trained and employed by Transport Canada. Applicants must have successfully completed secondary school, pass written aptitude tests and personal interviews, undergo a medical examination and security check, and have good eyesight. Successful applicants undergo a maximum of two years training at the Transport Canada Training Institute in Ontario. Training for other occupations in this group is provided by an employer on the job.

Nature of Supply

Approximately half the people employed in this occupation group have completed some form of post-secondary education. Most are male. Women accounted for just 3 percent of employment in this occupational area according to the 1986 Census. The percentage of young people declined significantly between 1981 and 1986 to well below the average for all occupations. The proportion of older workers increased over the same period to approach the overall average. The largest concentration of these support workers reside in the Gander area.

Job Prospects

Employment in these occupations declined by almost 20 percent between 1981 and 1986, and growth for the decade as a whole was well below average. Prospects should improve in the 1990's, but employment is still expected to expand at a slower than average pace over the next five years. At present, there is a shortage of air traffic controllers, and demand for these highly skilled workers is expected to remain strong. A significant number of replacement openings are also expected by 1995.

Most people in these occupations enjoy stable year-round employment, and are not significantly affected by fluctuations in economic activity. The number of U.I. beneficiaries relative to employment in these occupations is well below the provincial labour market average. Station attendants account for most of the beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 21,564 or less
Average Worker	$ 35,686
Highest 10% of Workers	$ 58,430 or more

Source: 1986 Census

Deck Officers 9151

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	406	-1.5	0.8	80
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	155	21
Grand Falls	30	1
Stephenville	15	0
Corner Brook	20	1
Labrador	0	0
Harbour Grace	25	3
Clarenville	10	0
Marystown	25	1
Gander	65	2

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	98	2	7	79	14	98	2
	1986	94	6	9	79	12	98	2
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (71)
- Water Transport (70)

Public Administration (17)
- Federal (14)
- Provincial (3)

Manufacturing (9)
- Fish Products (3)
- Petroleum (3)
- Shipbuilding (3)

Deck Officers 9151

Job Environment
Deck officers include ship's masters, mates, pilots, navigators, and other officers who operate ships or self-propelled vessels to transport passengers or cargo on oceans, in coastal areas, and on inland waters. They set the ship's course, use navigational aids, supervise operations, inspect cargo movement, and manage the deck crew. They work long, variable hours and travel for extended periods. On board ship, the work area is typically indoors and in confined spaces.

Training and Qualifications
Training for these occupations takes place through a combination of on-the-job experience (sea time) and classroom instruction. The Marine Institute offers a diploma program in nautical science which takes approximately four years to complete, depending on how quickly the required periods of training in industry are completed. Graduates of these programs have obtained the Watchkeeping Mate and First Mate Intermediate Trade Certificates. As an alternative, the Institute also offers instruction for Ministry of Transport Certificates of Competency for experienced crew or junior officers who have the required sea time.

Nature of Supply
Most deck officers in the province have completed some form of post-secondary education, either an institute of technology program or a Ministry of Transport certificate program. This occupational area is dominated by men, although the proportion of women increased from 2 to 6 percent between 1981 and 1986, according to Census figures. The proportion of young people in this occupation was well below average, reflecting the time it takes to complete the classroom work and acquire the necessary sea time. Not surprisingly, the percentage of older workers was slightly higher than average. This occupation is represented in most areas of the province.

Job Prospects
Employment in this occupation declined by almost 20 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Prospects should show some improvement in the 1990's, however, employment is still expected to expand at a slower than average rate over the next five years. This view is based on the outlook for water transport, public administration, and components of the manufacturing sector where most deck officers are employed. However, given the large number of officers approaching retirement, a significant number of replacement openings are expected over this period. Over three-quarters of the job opportunities that arise by 1995 will be from this source.

Most people in these occupations enjoy stable year-round employment. Relatively few positions are seasonal. The occupation is somewhat sensitive to fluctuations in economic conditions, however. The number of U.I. beneficiaries relative to employment in this occupation is considerably less than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 22,517 or less
Average Worker	$ 37,601
Highest 10% of Workers	$ 55,049 or more

Source: 1986 Census

Engineering Officers, Ship 9153

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	376	0.3	1.0	60
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	120	11
Grand Falls	20	3
Stephenville	15	9
Corner Brook	5	3
Labrador	0	0
Harbour Grace	60	8
Clarenville	25	2
Marystown	80	6
Gander	35	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	100	0	12	73	15	96	4
	1986	97	3	5	77	18	97	3
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (52)
- Water Transport (51)

Manufacturing (28)
- Fish Products (25)
- Petroleum (1)
- Shipbuilding (1)

Public Administration (11)
- Federal (8)
- Provincial (3)

Engineering Officers, Ship

9153

Job Environment

This occupational group includes engineering assistants, mechanics, as well as marine engineer officers. The latter operate and repair the main ship engines, supervise and coordinate the activities of the engine room crew, and inspect the engines and other mechanical and electrical equipment. The work takes place in cramped conditions and involves exposure to noise, odours, and hazards requiring the use of safety equipment and clothing.

Training and Qualifications

Training for these occupations takes place through a combination of on-the-job experience (sea time) and classroom instruction. The Marine Institute offers a three-year diploma program in marine engineering. Graduates of the program who have also completed the necessary qualifications, including sea time, will be accepted as candidates for the Fourth Class Steam and Motor Certificate of Competency. Training for additional certification up to the first class (combined) level is also available at the Marine Institute.

Nature of Supply

Approximately two-thirds of engineering officers in the province have completed some form of post-secondary education, either an institute of technology program or a Ministry of Transport certificate program. The occupation is dominated by men. Women accounted for just 3 percent of these positions at the time of the 1986 Census. The proportion of young people in this occupational area declined significantly in the early 1980's to well below the average for all occupations. The percentage of older workers increased over this period to more than twice the all-occupation average. Engineering officers can be found in most regions of the province.

Job Prospects

Employment in this occupation declined by 6 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been positive but below average. This situation should continue into the 1990's. Employment is expected to expand, but at a slower than average pace over the next five years. This view is based on the outlook for water transport, components of the manufacturing sector, and public administration, where most engineering officers are employed. Given the large number of officers approaching retirement age, a significant number of replacement openings are expected over this period. This source should account for most of the job opportunities that arise by 1995.

Most people in this occupation are employed year-round. Relatively few positions are seasonal. The occupation is somewhat sensitive to fluctuations in economic conditions, however. The number of U.I. beneficiaries relative to employment in the occupation is considerably less than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 18,747 or less
Average Worker	$ 34,068
Highest 10% of Workers	$ 58,991 or more

Source: 1986 Census

Truck Drivers

9175

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	3,598	-2.1	2.9	853
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	1,220	249
Grand Falls	450	87
Stephenville	200	65
Corner Brook	510	123
Labrador	230	11
Harbour Grace	260	64
Clarenville	225	60
Marystown	80	24
Gander	210	66

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	98	2	22	72	6	89	11
	1986	99	1	17	77	6	86	14
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (33)
- Truck Transport (23)
- Miscellaneous Transport (6)
- Electric Power (1)

Trade (27)
- Wholesale (19)
- Retail (8)

Manufacturing (12)
- Food and Beverage (6)
- Pulp & Paper (2)
- Non-Metallic Minerals (2)

Truck Drivers

9175

Job Environment

This occupational group includes city pick-up and delivery drivers, large truck and tractor-trailer drivers, and those who drive special trucks, such as dump trucks or tow trucks. Truck drivers work in firms that maintain their own fleets for internal use (private trucking), or in firms which haul goods for others (for-hire trucking). Truckers may also own their trucks (owner-operators) and broker their services either to the private or the for-hire sectors. They may also have a wide range of duties in addition to driving a truck, such as planning schedules, logistics, and just-in-time deliveries; completing log books and documents required for border crossings; and learning how to use new technologies that affect the industry. Loading and unloading is usually handled by terminal and warehouse workers, but may sometimes be required of the driver. Truck drivers may also need to know safety regulations, dangerous goods regulations, first aid, the rules of the road, and defensive driving. The work week varies from 40 to 60 hours, and working conditions are generally no more hazardous than in other industrial occupations.

Training and Qualifications

The qualifications for these positions vary, but usually drivers must be 18 years of age and hold a valid drivers license. Depending on the type of truck, special licenses may be required. The Western Community College offers a 16 week program in commercial transport. Students completing medium transports maintain a Class 5 license, those completing tandem dumps receive a Class 3 license, and those completing a tractor-trailer qualify for a Class 1 license.

Nature of Supply

Most people in this occupation have no formal post-secondary education. Approximately 15 percent have completed a community college or trade school program. The vast majority of truck drivers in the province are male. Women accounted for just 1 percent of employment in this occupation at the time of the 1986 Census. The proportion of young people in the occupation declined in the early 1980's to slightly below the average for all occupations. This may have been related to a lack of job opportunities for new entrants to the occupation during this period. The percentage of older workers was also slightly below average. Truck drivers are employed in significant numbers in all regions of the province.

Job Prospects

Employment in this occupation declined by almost 20 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Job prospects should show some improvement in the 1990's as employment levels are projected to increase at a faster than average rate over the next five years. This view is based on the outlook for a broad range of industries which employ truck drivers, the most notable being transport, trade, and components of the manufacturing sector. A significant number of replacement openings is also expected over this period.

Most truck drivers are employed year round, but a significant number are employed seasonally. This is not surprising, given the seasonal nature of the construction and fish products industries in the province, where many truck drivers are employed. The occupation is also sensitive to fluctuations in economic activity, so job opportunities may be scarce during economic downturns. The number of U.I. beneficiaries relative to employment in the occupation is roughly equal to the average for all occupations. Typically, beneficiary levels during the winter months are twice the level shown here. Tractor-trailer drivers account for a relatively small proportion of beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 10,801 or less
Average Worker	$ 21,032
Highest 10% of Workers	$ 35,255 or more

Source: 1986 Census

Hoisting Occupations 9311

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	206	-2.2	4.4	67
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	45	19
Grand Falls	40	3
Stephenville	30	4
Corner Brook	35	2
Labrador	0	0
Harbour Grace	10	1
Clarenville	25	0
Marystown	10	4
Gander	5	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	95	5	8	80	12	92	8
	1986	100	0	3	84	13	88	12
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (54)
- Pulp and Paper (29)
- Food and Beverage (10)
- Metal Fabricating (5)

Mining (17)
- Mining Services (12)
- Non Metals (2)
- Petroleum & Gas (2)

Construction (15)

Hoisting Occupations

9311

Job Environment

These occupations are concerned with lifting, moving, and positioning loads; and operating equipment, such as power operated cranes, hoists, and winches. Operators are responsible for driving and operating their machines, erecting and rigging cables, and attaching ropes, chains, slings and shackles. These occupations are found in a wide range of industries, including construction, mining, oil exploration, and water and rail transport. A crane operator must have good hand-eye coordination and pay close attention to safety procedures. While some operators are employed by contractors on a project-by-project basis, the majority are employed in permanent positions.

Training and Qualifications

Training for these occupations may take place on the job or through the completion of a post-secondary course in crane operation. The Western Community College offers a four-month program in crane operation. A class three driver's license is also required to operate a mobile crane.

Nature of Supply

Most people in this occupation have no formal post-secondary education. Approximately one-quarter have completed a community college program. At the time of the 1986 Census, all crane operators in the province were men. The below average proportion of young people and above average proportion of older workers in the occupation suggests that many of these workers become crane operators only after having gained considerable experience on-the-job. Crane operators are located in most regions of the province.

Job Prospects

Employment in this occupation declined by almost 20 percent between 1981 and 1986. Growth for the decade as a whole is estimated to have been negative. Job prospects should improve considerably in the 1990's as employment is projected to increase at a faster than average pace over the next five years. This view is based on the outlook for components of the manufacturing industry, mining, and construction, where most crane operators in the province are employed. Over 40 crane operators will be required for the Hibernia development during peak construction periods. A number of replacement openings are also expected by 1995.

While most people in this occupation are employed on a year-round basis, a small percentage are employed seasonally. Unemployment levels tend to rise slightly during the winter months. The occupation is also sensitive to fluctuations in economic activity, and periods of unemployment are not unusual during economic slowdowns. The number of U.I. beneficiaries relative to employment in the occupation is slightly less than average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 3,964 or less
Average Worker	$ 28,974
Highest 10% of Workers	$ 39,743 or more

Source: 1986 Census

Printing Press Occupations 9512

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	142	0.6	2.5	29
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	80	11
Grand Falls	20	0
Stephenville	0	1
Corner Brook	10	0
Labrador	0	0
Harbour Grace	0	2
Clarenville	0	0
Marystown	5	0
Gander	10	2

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	96	4	0	100	0	93	7
	1986	80	20	31	66	3	84	16
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (64)
- Printing & Publishing (64)

Services (23)
- Education (9)
- Hospitals (9)
- Health & Welfare, Non-Hospital (5)

Public Administration (5)
- Federal (5)

Printing Press Occupations 9512

Job Environment

Commercial press operators, job printers, and newspaper press operators are some of the occupations in this group. Press operators set up and run sheet, web-fed offset, letterpress, gravure, flexographic and other presses. Their work in preparing a press may include transferring a photographed image to a printing plate, installing the plate on the machine, applying ink to the plate, and sometimes making fine mechanical adjustments. During the printing run the operator observes and controls the press, monitoring the quality of printing. On a large press, the operator may supervise other workers.

Training and Qualifications

Training for this occupation may take place on the job, but employment prospects are greatly enhanced with the completion of a community college program in printing. The Cabot Institute offers a ten-month pre-employment program in printing.

Nature of Supply

Most people in this occupational area have no formal post-secondary education, although 30 percent have completed a community college program. Men still account for most of the employment in this area, but the proportion of women had increased to 20 percent by 1986, compared to 4 percent in 1981. The percentage of young people in the occupation also increased significantly over this period to exceed the average for all occupations. The proportion of older workers was less than the overall average. Over half the printers in the province reside in the St. John's area.

Job Prospects

Employment in this occupation declined slightly between 1981 and 1986, and growth for the decade as a whole is estimated to have been well below average. Printing occupations are expected to grow at about the average rate for all occupations over the next five years. This view is based on the outlook for a number of industries which employ printers, the largest being printing and publishing, education and health, and public administration. A number of replacement openings are also expected over this period. These openings will account for about one-third of the total job opportunities expected by 1995.

For the most part, this occupation offers stable year-round employment and is not significantly affected by fluctuations in the level of economic activity. The number of U.I. beneficiaries relative to employment in the occupation is less than the average for all occupations.

1985 Annual Earnings

Lowest 10% of Workers	$ 12,628 or less
Average Worker	$ 19,833
Highest 10% of Workers	$ 30,243 or more

Source: 1986 Census

Power Station Operators 9531

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	295	-3.4	-2.0	21
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	65	1
Grand Falls	70	0
Stephenville	25	0
Corner Brook	50	1
Labrador	65	1
Harbour Grace	10	0
Clarenville	0	0
Marystown	10	1
Gander	15	0

Census - 1981 and 1986 (%)		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	96	4	11	70	19	100	0
	1986	100	0	1	86	13	100	0
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Transport, Communications & Utilities (73)	Services (11)	Manufacturing (9)
- Electric Power (72)	- Education (9)	- Food & Beverages (6)
- Water Utilities (1)	- Hospitals (2)	- Pulp & Paper (3)

Power Station Operators

9531

Job Environment

This group includes power station operators in thermal, hydro, and diesel electric generating plants; and power system operators who control the transmission and distribution of power in electrical networks. Their responsibilities include operating remote-control substations, stand-by generating plants, and electrical power conversion systems. This involves monitoring and adjusting controls, inspecting equipment, and performing other duties specific to each facility.

Training and Qualifications

There are no formal educational requirements for these positions, other than high school graduation; however, employment prospects would be greatly enhanced with the completion of a related community college program such as basic electrical. Training for power systems operators/ control room operators takes place through a three year in-house apprenticeship program. Diesel plant operators should be familiar with the operation and routine maintenance of diesel engines. This knowledge could be gained on the job or through a community college program.

Nature of Supply

Just over half the people employed in these occupations have some form of formal post-secondary education. In most cases, they completed a community college or trade school program. At the time of the 1986 Census, this occupation was entirely dominated by men. The proportion of young people declined significantly in the early 1980's, reflecting a lack of job opportunities for new entrants in this occupational area. The percentage of older workers was considerably higher than for the workforce as a whole. Power station operators are employed in most regions of the province.

Job Prospects

Employment in these occupations declined by over 20 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. The occupation may shrink even further over the next five years due to the adoption of new technology in this field. A number of replacement openings are expected over this period given the number of power station operators approaching retirement age. All the job vacancies that arise in this occupational area over the next five years are expected to come from this source.

Power station operators enjoy stable year-round employment and are not significantly affected by fluctuations in economic activity. This is reflected in the low number of U.I. beneficiaries in this occupational area.

1985 Annual Earnings

Lowest 10% of Workers	$ 21,304 or less
Average Worker	$ 29,028
Highest 10% of Workers	$ 39,569 or more

Source: 1986 Census

Stationary Engine and Utilities Equipment Operating and Related Occupations

9539

Employment Trends	Number of Jobs 1990	Average Annual Growth Rates (%) Estimated 1981 - 1990	Average Annual Growth Rates (%) Projected 1990 - 1995	Number of Job Openings 1990 - 1995
This Occupation	648	-3.2	0.6	81
All Occupations	201,000	1.3	2.2	50,353

Distribution By Canada Employment Centre

CEC Area	1986 Employment	September, 1990 Regular U.I. Beneficiaries
St. John's	210	19
Grand Falls	90	4
Stephenville	50	7
Corner Brook	90	5
Labrador	60	0
Harbour Grace	40	10
Clarenville	50	6
Marystown	40	10
Gander	20	3

Census - 1981 and 1986 (%)

		Men	Women	Age<25	Age 25-54	Age>54	Full-time	Part-time
This Occupation	1981	99	1	12	75	13	99	1
	1986	98	2	13	72	15	96	4
All Occupations	1981	63	37	27	64	9	83	17
	1986	60	40	21	71	8	80	20

1986 Census - Main Industries of Employment (%)

Manufacturing (39)
- Food & Beverage (27)
- Pulp & Paper (7)
- Petroleum (2)

Services (24)
- Hospitals (14)
- Education (8)
- Health & Welfare, Non-Hospital (2)

Public Administration (15)
- Federal (7)
- Provincial (5)
- Local (3)

Stationary Engine and Utilities Equipment Operating and Related Occupations

9539

Job Environment

Air-conditioning operator, gas-compressor operator, and stationary engineer are typical occupations in this group. Stationary engineers operate and maintain such equipment as steam turbines, steam boilers, instrumentation and process controls, air compressors, refrigerating systems, water conditioning systems, and chemical recovery systems. They are also responsible for power and process operation, maintenance, and administration of safety and efficiency standards. Stationary engineers must be familiar with a variety of instruments, including hand tools and power tools. Their work involves exposure to high temperatures and contact with oil, grease, chemicals and odours. Shift work and weekend work can be expected in these occupations.

Training and Qualifications

Training for these occupations takes place through a community college or institute of technology program. The Marine Institute offers a three-year program in power engineering technology. Graduates of this program who have obtained six months operating experience are qualified to write the Third Class Certificate of Competency Examination. Graduates of the Cabot Institute's ten-month pre-employment program in power engineering are qualified as fourth class power engineers. Power engineers can undertake further periods of part-time or full-time study at the Institute to become upgraded to 3rd, 2nd, and 1st class certificate levels.

Nature of Supply

Over two-thirds of power engineers in the province have completed an institute of technology or community college program. The occupation is male dominated. Women accounted for just 2 percent of employment at the time of the 1986 Census. At 13 percent, the percentage of young people in the occupation was well below average. This may be related to a lack of job opportunities for new entrants to the occupation in the 1980's. Conversely, the proportion of older workers was considerably higher than average. Power/stationary engineers are employed in all regions of the province.

Job Prospects

Employment in this occupational area declined by over 30 percent between 1981 and 1986, and growth for the decade as a whole is estimated to have been negative. Current projections call for employment growth to be positive but below average to 1995. This view is based on the outlook for a broad range of industries which employ stationary engineers, the largest being manufacturing, education, health, and public administration. However, given the large proportion of this workforce approaching retirement age, a significant number of replacement openings are expected over this period. Most of the vacancies that arise over the next five years will be from this source.

Generally speaking, stationary engineers enjoy stable year-round employment and are not affected by fluctuations in the level of economic activity. However, some positions are seasonal as unemployment levels tend to rise during the winter months. The number of U.I. beneficiaries relative to employment in the occupation is considerably less than the provincial labour market average.

1985 Annual Earnings

Lowest 10% of Workers	$ 16,355 or less
Average Worker	$ 25,452
Highest 10% of Workers	$ 36,721 or more

Source: 1986 Census

ERRATA

The following errors in the index were discovered after the document was printed :

Page 258

Data Processing Equipment Operators - says p. 202, should say p. 132

Dentists - says p. 80, should say p. 82

Page 259

Engineering Technologists and Technicians - says p. 48, should say p. 50

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Volume

2

JOB FUTURES

NEWFOUNDLAND

Experience of Recent Graduates

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If the reader has any comments, suggestions or requires further information on **Volume 2 - Experience of Recent Graduates**, contact :

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INTRODUCTION

JOB FUTURES - NEWFOUNDLAND : Volume 2 - Experience of Recent Graduates may be used as a career guidance and planning tool for educational counsellors and students. It gives the reader an opportunity to see how graduates in a particular field of study are doing in today's market place. When used in conjunction with **Volume 1 - Occupational Outlooks**, it provides information essential to making informed career choice decisions. It also provides the type of information necessary for effective program development and service planning for the postsecondary system, and for educational research.

The single page program profiles contained in this report are generated from the Department of Education graduate follow-up survey. The Research and Policy Division surveys the graduates of selected programs from postsecondary institutions annually. The main purpose of the survey is to determine graduate placement and its relation to studies taken, approximately one year after graduation. The survey is also invaluable in identifying the range of job opportunities available to graduates of a particular academic program.

Graduates from the postsecondary system have been surveyed since 1973 by the Department of Education and/or the colleges. Until recently, the information was used solely for the evaluation of programs by the Department, but with the technological advances of today, it is possible to provide counsellors and/or students career oriented information in a timely fashion as well.

The intent of this publication is to provide as much information on programs of the postsecondary system as possible. We have reported on all programs where there were at least eight graduates in the 1988-89 academic year. Some of Memorial University degree programs have been grouped together to aid reporting, and are duly footnoted. Programs surveyed with less than eight graduates and not reported on are found in Appendix B. View the analysis of programs cautiously, especially when the response rate and/or the number of graduates is low. We would also request that you familiarize yourself with the Users Guide before using this document as it provides helpful interpretative information.

Some programs listed in this publication may no longer be offered or may have changed their names or durations. Please consult with the appropriate postsecondary institution to ensure that the program of interest is still active. Also, note that results from private training institutions are not presented in this publication so as to respect the confidentiality concerns of those institutions.

SURVEY METHODOLOGY

The graduate follow-up survey is not a random sample. Rather, all graduates of preemployment and diploma level programs from the provincial institutes, community colleges and private training institutions are surveyed. Graduates from Memorial University of Newfoundland undergraduate degree programs are also surveyed (with the exception of medical programs, where further training beyond the bachelor level is required). Since the survey is not a sample, but a census of selected programs, statistics based on sampling theory cannot be applied to the data collected.

The graduate follow-up questionnaire (see Appendix A) is mailed to the graduate in the third week of April, generally ten months after graduation for community college/provincial institute programs. Also included with the questionnaire are a covering letter from the Minister of Education and a postage paid return envelope. Until the survey of 1989 graduates in 1990, all surveys were conducted through mail only. Each year, the graduates were sent a questionnaire in the third week of April. If the graduate had not responded by June 1, a second questionnaire and reminder were sent. No further follow-up was attempted. In 1990 to improve response rates, a telephone follow-up was attempted for those graduates who had not responded to the June 1 mail-out by August 1. A questionnaire similar to the mail questionnaire, edited for conversational flow, was developed for this purpose. Key variables were examined to determine whether or not there were differences between the responses gathered by mail and telephone. Since no major differences were noted, the two survey types were merged for analysis.

This process yielded a 34% response rate after the initial mail-out, a 55% response rate after the second mail-out, leading to an overall response rate of 74%. The reader is asked to note that the response figures have not been adjusted for those students who moved after graduation and could not be traced. If an adjustment had been made for non-delivered surveys, the overall response rate would have been approximately 81%.

This is a very high response rate for a survey of this type. However, caution should still be exercised in interpreting the information reported when the response rate and/or number of graduates is low. The Users Guide will provide the reader with a detailed explanation of the terms and statistics associated with each program.

OTHER SOURCES OF INFORMATION

Although this volume provides valuable information on postsecondary programs in Newfoundland, it should not be the only reference used for making career decisions. As much of the analysis in this volume focuses on one point in time for each year (the third week of April), the employment experiences reported by the graduates reflect the labour market situation at that time only. However, labour market conditions may change greatly from month to month.

A one year period following graduation is usually considered a period sufficient over which to conduct a thorough job search. However, this time span may not be long enough, particularly in periods of economic downturns, to absorb recent graduates into the work force. Therefore, the survey results are limited in determining the effectiveness of training programs. Moreover, they do not predict the long term employment success of graduates.

Further information on postsecondary programs can be found through a number of other sources:

Calendars may be obtained from postsecondary institutions, local Employment and Immigration Canada offices and guidance counsellors. These calendars should be consulted to find specific information on programs, including prerequisites required for entry.

Information on apprenticeship training programs may be obtained from the Division of Industrial Training, Department of Education. Telephone (709) 729-0588.

Looking Ahead : A Guide for Senior High Students. A publication of the Division of Student Support Services, Department of Education. Telephone (709) 729-3023.

CHOICES interactive computer programs are available at all high and junior high schools in the Province.

Career Information Hotline, Department of Employment and Labour Relations. Telephone (709) 729-6600, or toll free 1-800-563-6600

Job Futures (1990 edition) - Volume 1 Occupational Outlooks and **Volume 2 Experience of Recent Graduates,** produced by Employment and Immigration Canada, is a national version of **Job Futures - Newfoundland,** providing similar information at the national level.

KEY FINDINGS

To compete in today's job market, it is clear that education beyond high school is necessary. It is estimated that two thirds of all jobs created in Canada during this decade will require more than a high school graduation. Many of these jobs will demand at least five years of education and training beyond the high school level.

The type of postsecondary program chosen will have a significant impact on one's life after graduation. The chart below explores the relationship between program length and certain employment variables derived from the survey. Employment rates, employment in fields related to training, salary, length of job search, and satisfaction with the institution where training was taken are all correlated with the length of program taken. As program length increases, so do the percentages of the above variables.

These findings are consistent with data from other sources. According to Statistics Canada estimates, both the unemployment rate and the ratio of employment to population are strongly correlated with level of education. That is, the higher the level of education one has, the more likely it is for that person to be employed. The chart on the following page illustrates the March 1991 estimates for these two figures versus educational attainment for both Canada and Newfoundland.

Comparisons of selected survey variables by program length.

	1 year programs	2 year programs	3 year programs	University programs
Employment rate in reference week	60%	77%	77%	85%
Percentage working in related field during reference week	45%	65%	73%	74%
Most common hourly salary	$8.01 - $10	$8.01 - $10	$12.01 - $14	$14.01 -$16
Most common length of job search	1 month	1 month	Found job before graduation	Found job before graduation
Satisfaction with program	73%	70%	77%	69%
Satisfaction with institution	79%	74%	78%	88%

March 1991 estimates of unemployment rate and the ratio of employment to population for Canada and Newfoundland.[1]

Highest Level of Education	Canada		Newfoundland	
	Unemployment rate	Employment: Population	Unemployment rate	Employment: Population
0 to 8 years	19.7	26.7	38.1	18.0
Some secondary	17.8	46.5	34.7	25.5
High school graduate	11.8	64.3	22.4	49.1
Some postsecondary	10.3	63.2	*	44.5
Postsecondary certificate or diploma	9.2	71.7	16.2	65.7
University	4.5	81.5	*	84.9
All levels	11.7	58.1	22.3	42.0

* due to the variability associated with these estimates, they were not released by Statistics Canada.

[1] "The Labour Force", Statistics Canada, Catalogue 71-001 (March 1991)

USERS GUIDE

This guide will explain the terms and statistics presented on each program in this report. Each page of the PROGRAMS section contains a statistical summary or profile of a program, each profile following the same basic format.

As mentioned earlier, caution should be exercised when viewing this information, especially when the response rate and/or numbers of graduates are low. Guidance and employment counsellors should be consulted for interpretation of these results. This is not the only reference one should use in career searching. Refer to page 3 for other sources of information. It should also be noted that as some industries are seasonal in nature, e.g. forestry and construction, graduates from programs related to these fields may find related work on a seasonal basis only. As a result, because the survey takes place in April of each year many people in these seasonal occupations may not be working. The second graphic: Employment Since Graduation will be useful to track the employment history of such graduates.

One should note that some data are unavailable for selected two and three year college programs in the 1986-87 academic year. Problems encountered in data collection and verification during the first year of initiation and testing of the Department of Education Student Information System prevent completeness.

To assist you in interpretation of the profiles we have provided an annotated profile for the Bookkeeper Clerk program. The number that is enclosed in parenthesis corresponds to information provided below.

Bookkeeper Clerk (1)

Program Duration: (2) 1 Year **Award:** (3) Certificate of Vocational Education

Program Locations: (4) Fisher Institute of Applied Arts and Technology, Avalon Community College (Carbonear), Eastern Community College (Burin, Clarenville), Western Community College (Stephenville, Port Aux Basques), Central Newfoundland Community College (Baie Verte, Gander, Grand Falls, Lewisporte), Labrador Community College (Happy Valley)

ACADEMIC YEAR (5)	ENROLMENTS (6)	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		# (7)	%[1] (8)	# (9)	% (10)	FULL-TIME (11)	PART-TIME (12)	UNEMPLOYED (13)	OTHER (14)
1986-87	172	118	71.1	78	66.1	34	12	17	15
1987-88	169	98	59.8	60	61.2	28	7	18	7
1988-89	186	125	72.3	85	68.0	40	11	28	6

1. Program of instruction for college programs (Example: Bookkeeper Clerk). For Memorial University programs, this refers to the degree awarded. Should more than one major exist for a certain degree program at Memorial University, the major is listed in the upper right corner.

2. Program duration refers to the length of the instruction period (Example: 1 year). For Memorial University programs, one may refer to the university calendar for duration of individual degree programs.

3. Award upon successful completion of program (Example: Certificate of Vocational Education). For Memorial University programs, award refers to the degree conferred.

4. Location of program offerings in 1988-89 academic year. All Memorial University degrees were awarded from the St. John's campus in that year.

5. An academic year runs from September 1 to the following August 31.

6. Number of students remaining in a program after official drop dates (Example: 172, 169, and 186). If the program is two years long, then there are two numbers shown in each box, one for each year of study. Three numbers per box are shown for a three year program. The enrolment column is excluded for Memorial University programs.

7. Number of students who successfully completed the program (Example: 118, 98 and 125), i.e. the number of certificates/diplomas or degrees awarded.

8. Graduation rate for the community college system is defined to be the number of graduates divided by the difference between enrolments and continuing students (Example: 71.1, 59.8 and 72.3 percent). For Memorial University degree programs, this column is used for proportion of total undergraduate degrees awarded.

9. Number of graduates who responded to survey (Example: 78, 60 and 85). All graduates were surveyed.

10. Percentage of graduates who responded to the survey , i.e. the number of respondents divided by the total number of graduates for each year (Example: 66.1, 61.2 and 68 percent).

EMPLOYMENT IN REFERENCE WEEK

A Reference Week is a chosen time-frame used as a standardized measure for comparison of employment activity between programs. The Reference Week falls approximately ten months after graduation for college students (i.e. the third week of April).

11. Those respondents working 30 hours or more during the third week of April (Example: 34, 28 and 40). See Appendix A, #8.

12. Those respondents working less than 30 hours during the third week of April (Example: 12, 7 and 11). See Appendix A, #8.

13. Those respondents not working, yet actively seeking employment, during the third week of April (Example: 17, 18 and 28). This group would not include those respondents who identified the following reasons for not working: maintaining household, attending school full-time, illness or disability and not interested in working. These people are not actively seeking work and are considered to be out of the labour force. See Appendix A, #8.

14. Those respondents not actively seeking work as identified above, plus those who returned the survey without indicating their employment status during the reference week (Example: 15, 7 and 6). See Appendix A, #8.

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES

The remainder of the information provided in each profile refers to 1989 graduates only. For the purpose of presentation, the categories "strongly related" and "partly related" (Appendix A questions 7 and 9c) were grouped together as "related". The two charts presented are complementary in depicting the program's employment outcomes. The first chart provides a snapshot at a specific point in time. The second chart provides a history of employment since graduation. The joint perspective of these charts gives a comprehensive description of the labour market outcomes of the graduates.

Diagram 1 (15)

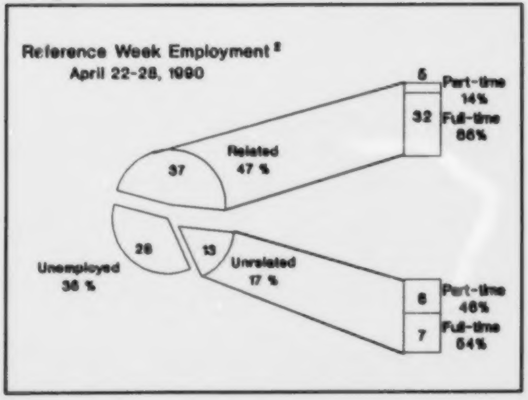
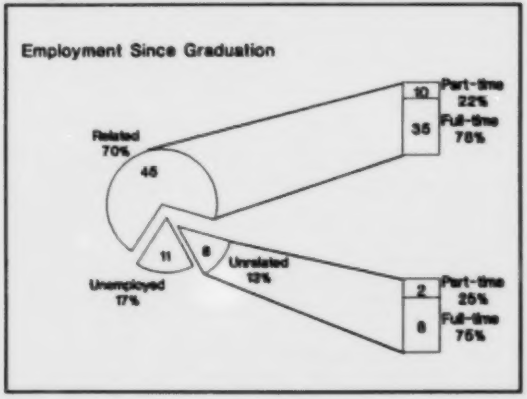


Diagram 2 (16)



15. Diagram 1: Reference Week Employment, provides a statistical snapshot of the employment situation of 1989 graduates during the week of April 22-28, 1990. The major advantage of using a common reference week is that it allows employment comparisons with Statistics Canada Labour Force Survey data, and with graduate surveys from previous years. Since employment levels may change seasonally for certain occupations, such as Carpentry and Forestry, the Reference Week data is incomplete and misleading by itself. This analysis was developed from Appendix A, #'s 8 and 9c. The sum of full-time related and full-time unrelated in this chart equals the full-time figure shown in the table above, under "Employment in Reference Week", unless indicated otherwise through a footnote. This same statement is true for part-time employment (Example: 28 of the respondents were unemployed, 37 worked in a related field, 5 were working part-time and 32 full-time in the reference week. Of the 13 working in an unrelated field, 6 were working part-time and 7 full-time. The footnote number after the chart title indicates that 1 person did not report the relation of their employment to their training program, although they reported they were working full-time).

16. Diagram 2: Employment Since Graduation, shows the employment activity of graduates since graduation, as opposed to a single reference week (as in Diagram 1). The data for this analysis are captured by Appendix A, #7. The respondents are categorized into the "highest" level of relatedness to the field of study which they indicated in question 7. For instance, a person indicating that they had worked part-time in a strongly related field and full-time in an unrelated field since graduation, is reflected in the graph as a part-time worker in a related field. This question was not asked on the telephone survey, so the data cover only those who responded by mail (Example: 11 respondents were unemployed since graduation, 45 worked in a related field since graduation - 10 part-time and 35 full-time. Of the 8 who worked in an unrelated field since graduation, 2 worked part-time and 6 full-time).

WAGE LEVELS (17)	#	%
$4.00 - $6.00	17	32.1
$6.01 - $8.00	18	34.0
$8.01 - $10.00	11	20.8
$10.01 - $12.00	4	7.5
$12.01 - $14.00	0	0.0
$14.01 - $16.00	2	3.8
$16.01 OR MORE	1	1.9
UNSPECIFIED	0	

OCCUPATIONS (18)	#	%
CLERICAL & RELATED	38	76.0
SALES	5	10.0
SERVICE	4	8.0
OTHER	3	6.0
UNSPECIFIED	2	

EMPLOYMENT SEARCH (19)	#	%
BEFORE GRADUATION	14	29.2
1 MONTH	8	16.7
2-3 MONTHS	14	29.2
4-6 MONTHS	6	12.5
MORE THAN 6 MONTHS	6	12.5
UNSPECIFIED	5	

17. Hourly wage for students working in related fields (Appendix A, #'s 9c and 9e). If the respondent indicated annual salary only and also indicated employment was full-time (Appendix A, #9d), the annual salary was converted to an hourly wage by dividing annual salary by 2080 (i.e. 40 hour work week x 52 weeks). Both the number of respondents and percentage of respondents for each category are provided (Example: 17 respondents earn between four to six dollars an hour in their respective occupations).

18. Occupational groupings (Appendix A, #9b) for respondents whose most recent jobs were full-time (Appendix A, #9d). Categorical divisions are based on the Canadian Classification and Dictionary of Occupations (See Appendix C for full listing of the major groupings). The three most common occupational groupings are shown for each program, the rest are grouped under "Other". Both the number of respondents and percentage of respondents for each category are provided (Example: 38 respondents are employed in occupations that are classified as "Clerical and Related").

19. Length of time it took to secure employment (Appendix A, #9f). This question was not asked on the telephone survey, so the data cover only those who responded by mail. Both the number of respondents and percentage of respondents for each category are provided (Example: 14 of the respondents found work before they graduated from their program of study).

RESIDENCE (20)	#	%
NEWFOUNDLAND	80	94.1
OUT OF PROVINCE	5	5.9
UNSPECIFIED	0	

FOOTNOTES (21)- Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

2. 1 worked full-time in reference week but did not specify relationship between job and training.

20. Residence at time of survey (Appendix A, #1). For this table, respondents were categorized as living in or out of the Province of Newfoundland at the time of the survey. Both the number of respondents and percentage of respondents for each category are provided (Example: At the time of the survey 80 respondents lived in Newfoundland and 5 lived outside of Newfoundland).

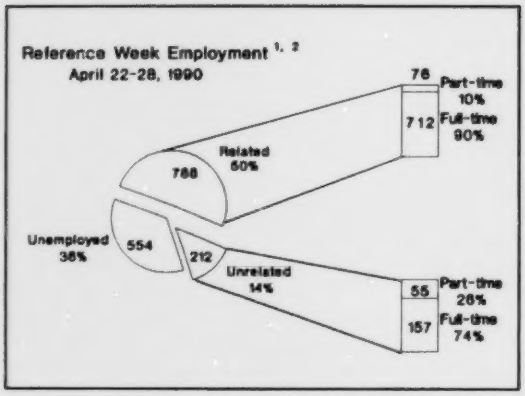
21. Any footnotes related to a program are printed in this section.

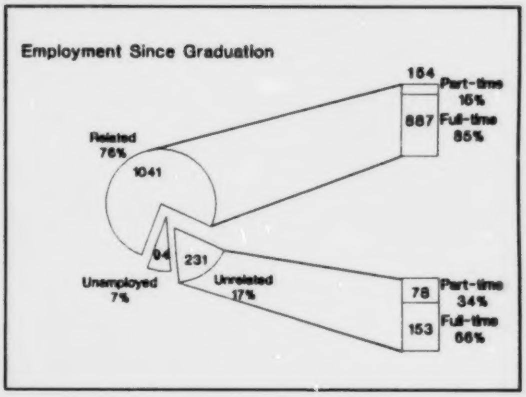
COLLEGE PROGRAMS

All College Programs

ACADEMIC YEAR	GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	#	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	1860	1021	54.9	515	146	191	169
1987-88	2173	1207	55.5	598	95	352	162
1988-89	2237	1671	74.7	874	133	554	110

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	161	15.2
$6.01 - $8.00	244	23.0
$8.01 - $10.00	228	21.5
$10.01 - $12.00	233	22.0
$12.01 - $14.00	104	9.8
$14.01 - $16.00	47	4.4
$16.01 OR MORE	43	4.1
UNSPECIFIED	96	

OCCUPATIONS	#	%
CLERICAL & RELATED	329	28.1
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	138	11.8
CONSTRUCTION TRADES	126	10.8
OTHER	578	49.4
UNSPECIFIED	55	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	450	37.8
1 MONTH	302	25.4
2-3 MONTHS	236	19.8
4-6 MONTHS	121	10.2
MORE THAN 6 MONTHS	81	6.8
UNSPECIFIED	101	

RESIDENCE	#	%
NEWFOUNDLAND	1486	89.0
OUT OF PROVINCE	184	11.0
UNSPECIFIED	1	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

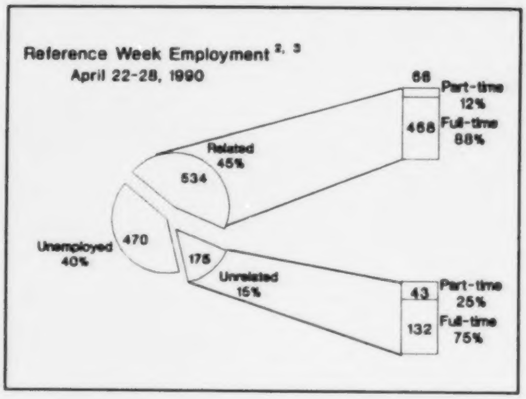
1. 5 worked full-time in reference week but did not specify relationship between job and training.
2. 2 worked part-time in reference week but did not specify relationship between job and training.

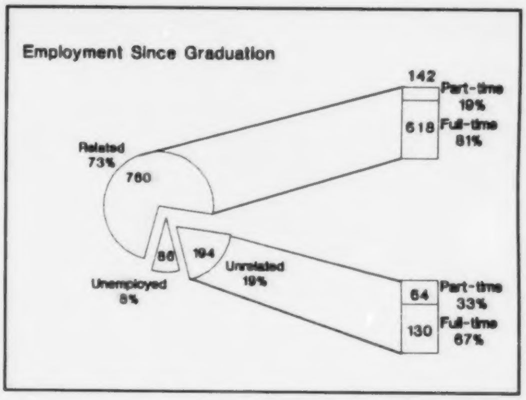
ONE YEAR COLLEGE PROGRAMS

All One Year Programs

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	2967	1626	68.5	892	54.9	429	133	180	150
1987-88	2914	1697	64.8	938	55.3	431	76	305	126
1988-89	2839	1707	66.7	1273	74.6	603	110	470	90

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	137	18.1
$6.01 - $8.00	205	27.2
$8.01 - $10.00	164	21.7
$10.01 - $12.00	148	19.6
$12.01 - $14.00	50	6.6
$14.01 - $16.00	27	3.6
$16.01 OR MORE	24	3.2
UNSPECIFIED	82	

OCCUPATIONS	#	%
CLERICAL & RELATED	233	27.8
CONSTRUCTION TRADES	118	14.1
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	110	13.1
OTHER	376	44.9
UNSPECIFIED	43	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	324	36.9
1 MONTH	217	24.7
2-3 MONTHS	178	20.3
4-6 MONTHS	94	10.7
MORE THAN 6 MONTHS	65	7.4
UNSPECIFIED	88	

RESIDENCE	#	%
NEWFOUNDLAND	1159	91.0
OUT OF PROVINCE	114	9.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).
2. 3 worked full-time in reference week but did not specify relationship between job and training.
3. 1 worked part-time in reference week but did not specify relationship between job and training.

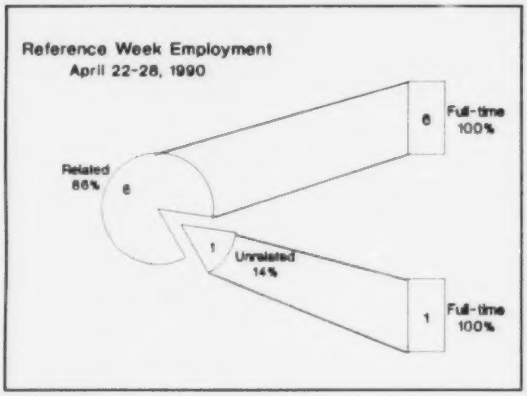
Aquaculture

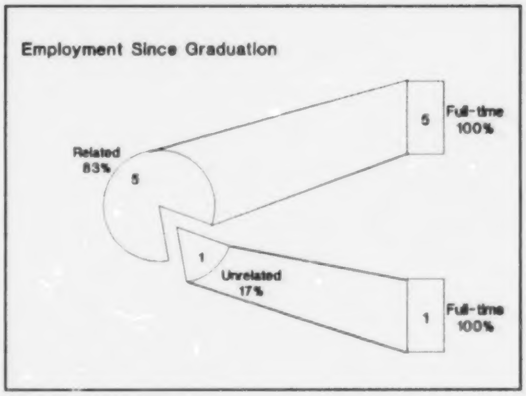
Program Duration: 1 Year **Award:** Graduate Diploma in Aquaculture

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	N/A	0	N/A	0	0	0	0
1987-88	12	7	58.3	4	57.1	4	0	0	0
1988-89	16	13	81.3	9	69.2	7	0	0	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	28.6
$10.01 - $12.00	1	14.3
$12.01 - $14.00	1	14.3
$14.01 - $16.00	1	14.3
$16.01 OR MORE	2	28.6
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	3	37.5
FISHING, TRAPPING & RELATED	2	25.0
TEACHING & RELATED	1	12.5
OTHER	2	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	14.3
1 MONTH	0	0.0
2-3 MONTHS	3	42.9
4-6 MONTHS	2	28.6
MORE THAN 6 MONTHS	1	14.3
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	6	66.7
OUT OF PROVINCE	3	33.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

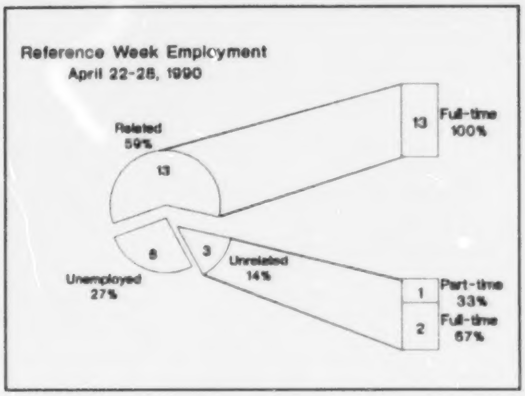
Auto Body Repair

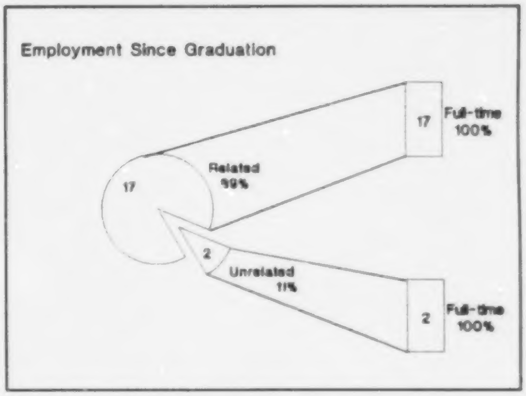
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Avalon Community College (Seal Cove), Central Newfoundland Community College (Gander)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	54	34	68.0	15	44.1	9	4	1	1
1987-88	62	30	49.2	18	60.0	11	1	4	2
1988-89	51	34	66.7	24	70.6	15	1	6	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	5.9
$6.01 - $8.00	10	58.8
$8.01 - $10.00	5	29.4
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	5.9
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	16	76.2
CONSTRUCTION TRADES	2	9.5
CLERICAL & RELATED	1	4.8
OTHER	2	9.5
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	11	61.1
1 MONTH	3	16.7
2-3 MONTHS	2	11.1
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	2	11.1
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	22	91.7
OUT OF PROVINCE	2	8.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

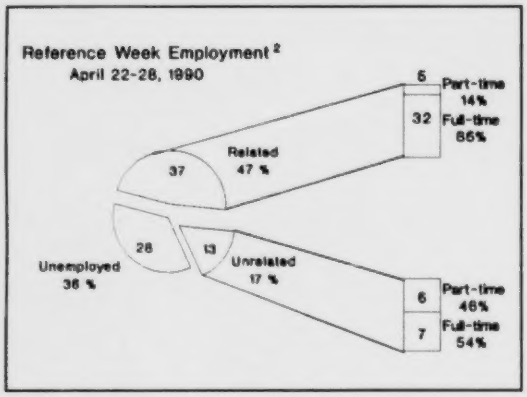
Bookkeeper Clerk

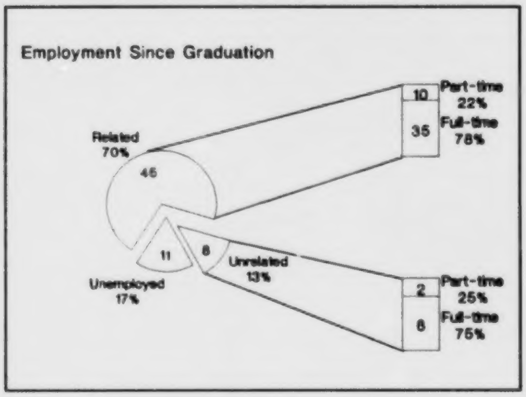
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Fisher Institute of Applied Arts and Technology, Avalon Community College (Carbonear), Eastern Community College (Burin, Clarenville), Western Community College (Stephenville, Port Aux Basques), Central Newfoundland Community College (Baie Verte, Gander, Grand Falls, Lewisporte), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	172	118	71.1	78	66.1	34	12	17	15
1987-88	169	98	59.8	60	61.2	28	7	18	7
1988-89	186	125	72.3	85	68.0	40	11	28	6

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment[2]
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	17	32.1
$6.01 - $8.00	18	34.0
$8.01 - $10.00	11	20.8
$10.01 - $12.00	4	7.5
$12.01 - $14.00	0	0.0
$14.01 - $16.00	2	3.8
$16.01 OR MORE	1	1.9
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	38	76.0
SALES	5	10.0
SERVICE	4	8.0
OTHER	3	6.0
UNSPECIFIED	2	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	14	29.2
1 MONTH	8	16.7
2-3 MONTHS	14	29.2
4-6 MONTHS	6	12.5
MORE THAN 6 MONTHS	6	12.5
UNSPECIFIED	5	

RESIDENCE	#	%
NEWFOUNDLAND	80	94.1
OUT OF PROVINCE	5	5.9
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).
2. 1 worked full-time in reference week but did not specify relationship between job and training.

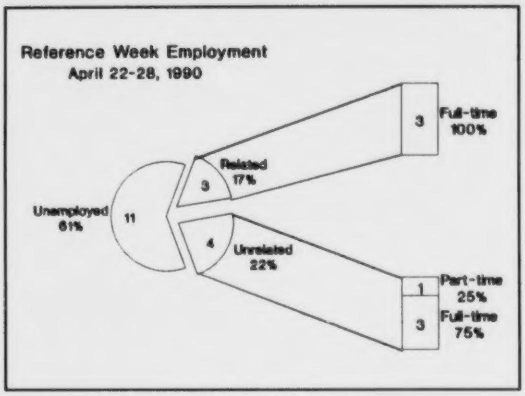
Bricklaying and Masonry

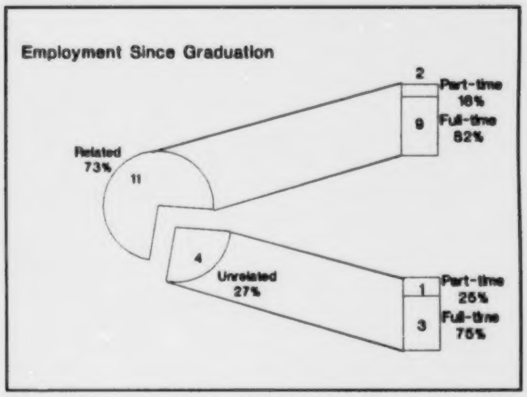
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	28	13	72.2	4	30.8	2	1	0	1
1987-88	26	18	69.2	8	44.4	5	0	3	0
1988-89	27	20	76.9	18	90.0	6	1	11	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	12.5
$8.01 - $10.00	1	12.5
$10.01 - $12.00	1	12.5
$12.01 - $14.00	1	12.5
$14.01 - $16.00	3	37.5
$16.01 OR MORE	1	12.5
UNSPECIFIED	2	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	6	50.0
SALES	2	16.7
TEACHING & RELATED	1	8.3
OTHER	3	25.0
UNSPECIFIED	2	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	23.1
1 MONTH	3	23.1
2-3 MONTHS	4	30.8
4-6 MONTHS	3	23.1
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	17	94.4
OUT OF PROVINCE	1	5.6
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

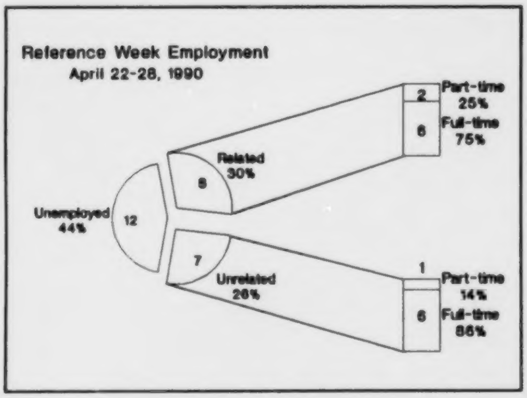
Business Education[1]

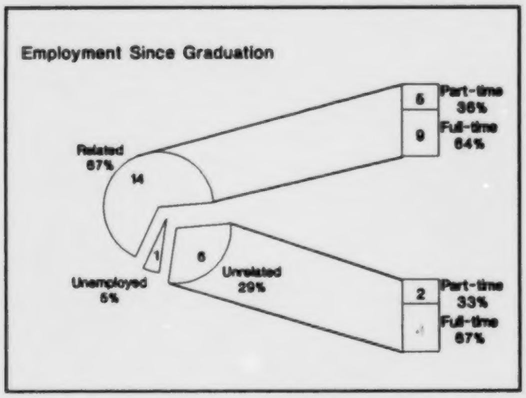
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Avalon Community College (Bell Island), Eastern Community College (Bonavista), Central Newfoundland Community College (Springdale)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[2]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	1	1	100	0	0.0	0	0	0	0
1987-88	45	30	75.0	23	76.7	9	3	9	2
1988-89	51	37	74.0	32	86.5	12	3	12	5

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	6	40.0
$6.01 - $8.00	2	13.3
$8.01 - $10.00	2	13.3
$10.01 - $12.00	5	33.3
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
CLERICAL & RELATED	16	88.9
SALES	1	5.6
SERVICE	1	5.6
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	8	44.4
1 MONTH	3	16.7
2-3 MONTHS	5	27.8
4-6 MONTHS	2	11.1
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	29	90.6
OUT OF PROVINCE	3	9.4
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. General certificate sometimes awarded instead of Bookkeeper Clerk, Clerk Typist, Stenographer Dicta-Typing or Stenographer Shorthand Typing.
2. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

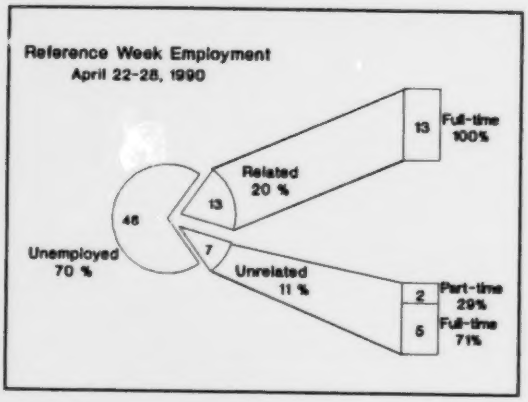
Carpentry

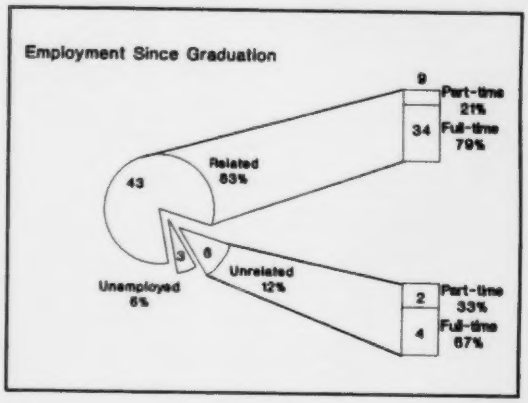
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Avalon Community College (Carbonear), Eastern Community College (Burin, Clarenville), Western Community College (Stephenville, Port Aux Basques), Central Newfoundland Community College (Grand Falls, Springdale), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	185	88	55.3	53	60.2	28	4	18	3
1987-88	175	111	65.7	67	60.4	21	3	39	4
1988-89	141	87	61.7	68	78.2	18	2	46	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	2.4
$6.01 - $8.00	15	36.6
$8.01 - $10.00	10	24.4
$10.01 - $12.00	7	17.1
$12.01 - $14.00	6	14.6
$14.01 - $16.00	1	2.4
$16.01 OR MORE	1	2.4
UNSPECIFIED	8	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	30	73.2
SALES	3	7.3
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	3	7.3
OTHER	5	12.2
UNSPECIFIED	6	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	16	35.6
1 MONTH	11	24.4
2-3 MONTHS	12	26.7
4-6 MONTHS	4	8.9
MORE THAN 6 MONTHS	2	4.4
UNSPECIFIED	5	

RESIDENCE	#	%
NEWFOUNDLAND	64	94.1
OUT OF PROVINCE	4	5.9
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

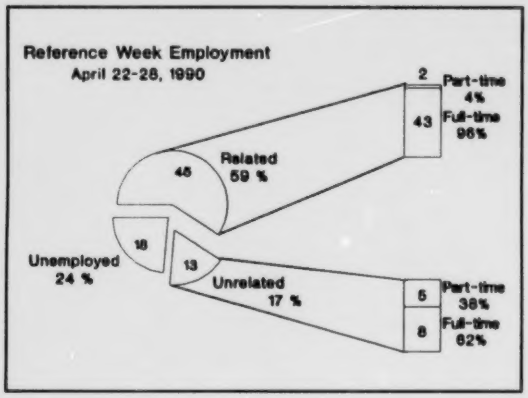
Clerk Accounting

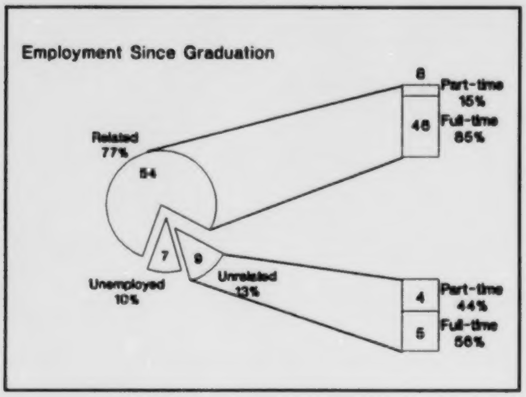
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology, Avalon Community College (Carbonear, Seal Cove, Placentia), Eastern Community College (Burin, Clarenville), Western Community College (Stephenville, St. Anthony), Central Newfoundland Community College (Gander, Lewisporte)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	199	90	53.9	51	56.7	22	11	10	8
1987-88	233	112	53.3	65	58.0	28	· 12	20	5
1988-89	186	110	63.2	81	73.6	51	7	18	5

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	13	24.1
$6.01 - $8.00	25	46.3
$8.01 - $10.00	12	22.2
$10.01 - $12.00	4	7.4
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
CLERICAL & RELATED	48	84.2
SERVICE	3	5.3
MANAGERIAL, ADMINISTRATIVE & RELATED	2	3.5
OTHER	4	7.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	22	36.1
1 MONTH	13	21.3
2-3 MONTHS	13	21.3
4-6 MONTHS	8	13.1
MORE THAN 6 MONTHS	5	8.2
UNSPECIFIED	4	

RESIDENCE	#	%
NEWFOUNDLAND	73	90.1
OUT OF PROVINCE	8	9.9
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

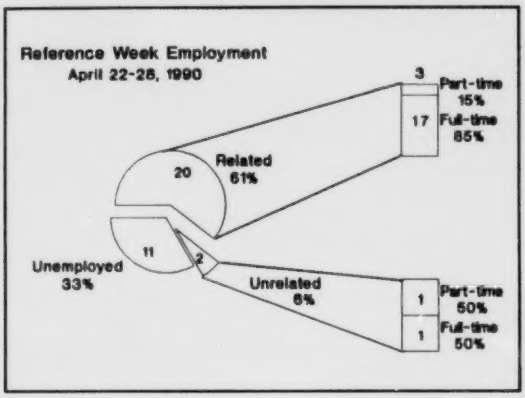
Clerk Typing

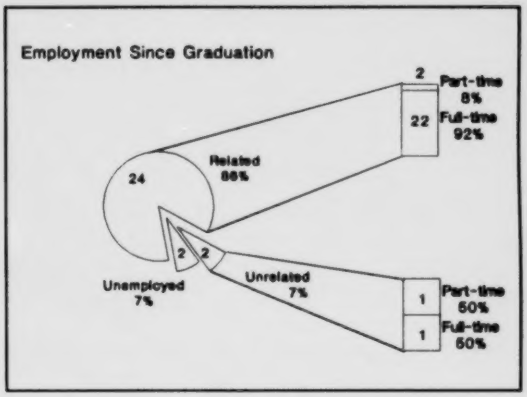
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology, Avalon Community College (Seal Cove, Placentia), Western Community College (Stephenville), Central Newfoundland Community College (Baie Verte, Lewisporte)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	197	86	61.0	51	59.3	24	10	6	11
1987-88	147	83	66.4	46	55.4	25	4	12	5
1988-89	93	50	59.5	35	70.0	18	4	11	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	6	22.2
$6.01 - $8.00	9	33.3
$8.01 - $10.00	9	33.3
$10.01 - $12.00	3	11.1
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
CLERICAL & RELATED	21	87.5
PROCESSING	2	8.3
SALES	1	4.2
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	10	40.0
1 MONTH	10	40.0
2-3 MONTHS	4	16.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	4.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	30	85.7
OUT OF PROVINCE	5	14.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

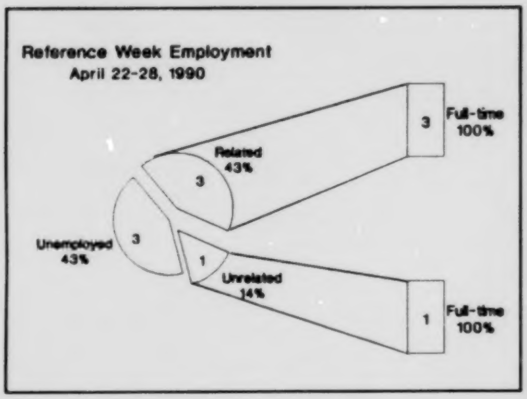
Commercial Arts

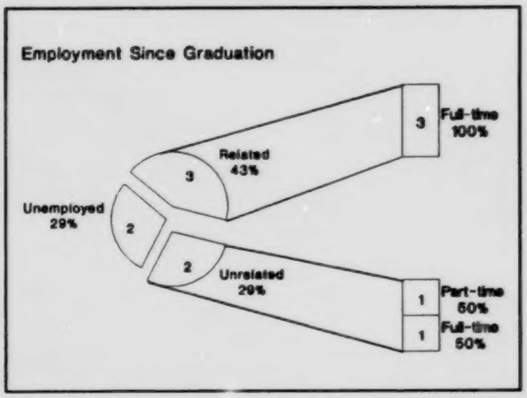
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	21	11	100	7	63.6	4	0	1	2
1987-88	17	12	75.0	4	33.3	2	1	0	1
1988-89	18	11	61.1	8	72.7	4	0	3	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	75.0
$6.01 - $8.00	1	25.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
OTHER CRAFTS & EQUIPMENT OPERATING	2	40.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	20.0
ARTISTIC, LITERARY, PERFORMING ARTS	1	20.0
OTHER	1	20.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	80.0
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	1	20.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	8	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

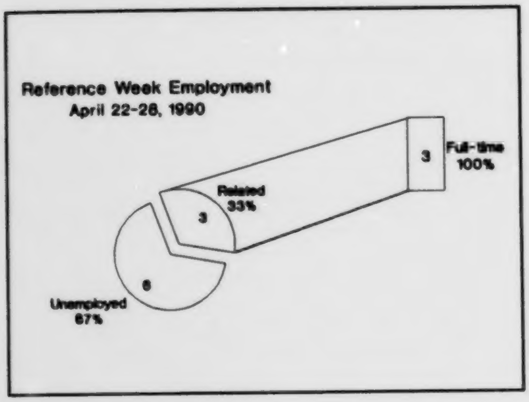
Commercial Baking

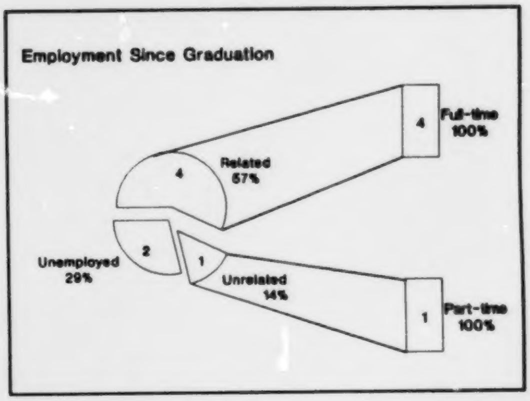
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology, Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	27	16	80.0	10	62.5	5	0	1	4
1987-88	16	12	92.3	3	25.0	2	0	1	0
1988-89	20	11	61.1	9	81.8	3	0	6	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	2	50.0
$6.01 - $8.00	2	50.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
PROCESSING	4	100
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	25.0
1 MONTH	2	50.0
2-3 MONTHS	0	0.0
4-6 MONTHS	1	25.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	9	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

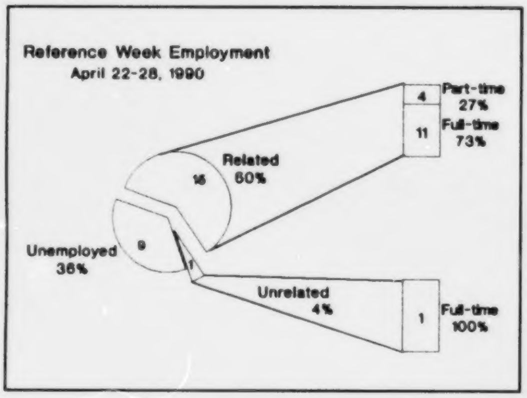
Commercial Transport

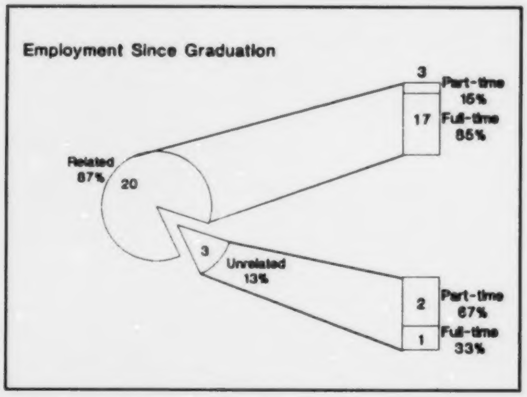
Program Duration: 6 Months **Award:** Certificate of Vocational Education

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	68	33	71.7	20	60.6	9	4	5	2
1987-88	0	0	N/A	0	N/A	0	0	0	0
1988-89	76	38	69.1	26	68.4	12	4	9	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	5	27.8
$8.01 - $10.00	6	33.3
$10.01 - $12.00	2	11.1
$12.01 - $14.00	2	11.1
$14.01 - $16.00	0	0.0
$16.01 OR MORE	3	16.7
UNSPECIFIED	3	

OCCUPATIONS	#	%
TRANSPORT EQUIPMENT OPERATING	13	81.3
MANAGERIAL, ADMINISTRATIVE & RELATED	1	6.3
FISHING, TRAPPING & RELATED	1	6.3
OTHER	1	6.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	5	23.8
1 MONTH	5	23.8
2-3 MONTHS	5	23.8
4-6 MONTHS	3	14.3
MORE THAN 6 MONTHS	3	14.3
UNSPECIFIED	3	

RESIDENCE	#	%
NEWFOUNDLAND	22	84.6
OUT OF PROVINCE	4	15.4
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

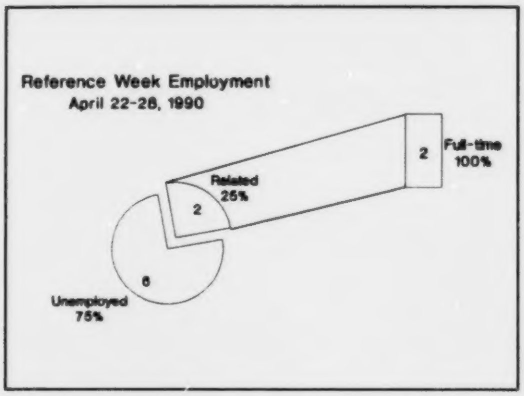
Construction Trades Helper

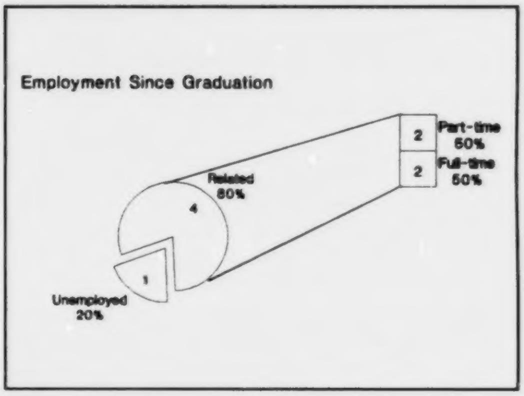
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Eastern Community College (Burin)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	7	4	57.1	1	25.0	0	0	0	1
1987-88	19	13	68.4	6	46.2	1	1	4	0
1988-89	13	10	76.9	8	80.0	2	0	6	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-26, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	100
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	3	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	33.3
1 MONTH	0	0.0
2-3 MONTHS	1	33.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	33.3
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	8	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

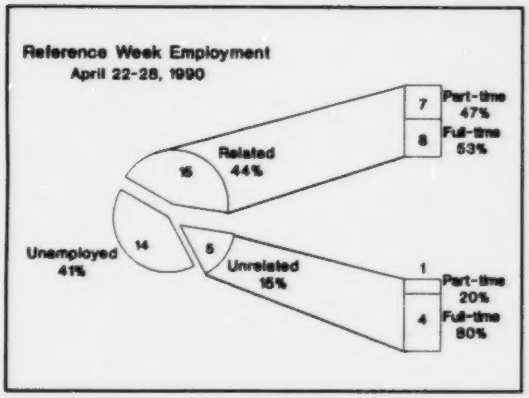
Cooking (Commercial)

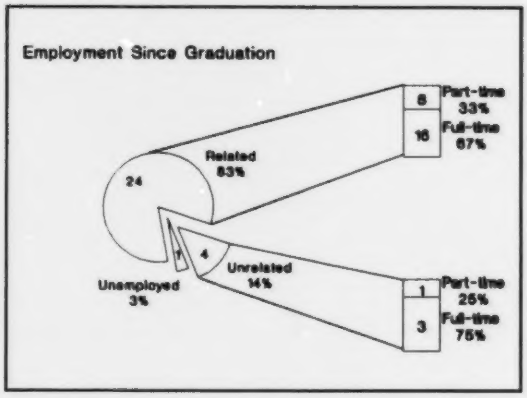
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Newfoundland and Labrador Institute of Fisheries and Marine Technology, Avalon Community College (Seal Cove), Eastern Community College (Burin), Western Community College (Stephenville), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	135	63	70.0	33	52.4	18	4	4	7
1987-88	108	47	63.5	25	53.2	15	3	6	1
1988-89	103	43	58.1	34	79.1	12	8	14	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	6	26.1
$6.01 - $8.00	4	17.4
$8.01 - $10.00	9	39.1
$10.01 - $12.00	3	13.0
$12.01 - $14.00	1	4.3
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
SERVICE	12	80.0
CLERICAL & RELATED	1	6.7
PROCESSING	1	6.7
OTHER	1	6.7
UNSPECIFIED	3	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	15	57.7
1 MONTH	1	3.8
2-3 MONTHS	4	15.4
4-6 MONTHS	3	11.5
MORE THAN 6 MONTHS	3	11.5
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	32	94.1
OUT OF PROVINCE	2	5.9
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

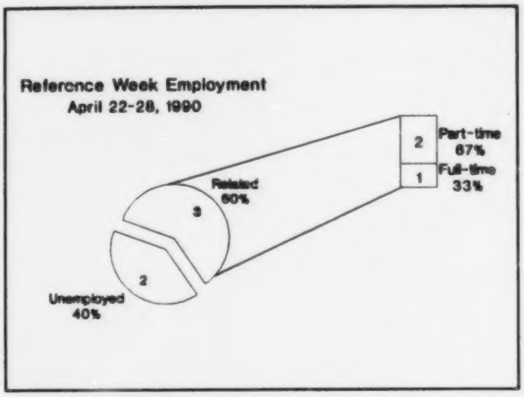
Dressmaking and Sewing

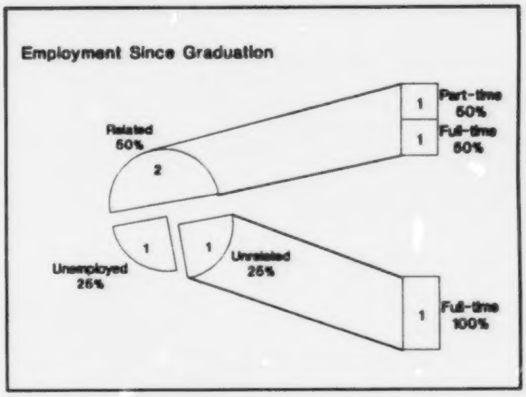
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	10	10	100	6	60.0	2	1	0	3
1987-88	13	11	91.7	8	72.7	2	1	3	2
1988-89	13	10	83.3	7	70.0	1	2	2	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	50.0
$8.01 - $10.00	1	50.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
ARTISTIC, LITERARY, PERFORMING ARTS	1	33.3
PROCESSING	1	33.3
MATERIAL HANDLING & RELATED, NEC	1	33.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	100
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	6	85.7
OUT OF PROVINCE	1	14.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

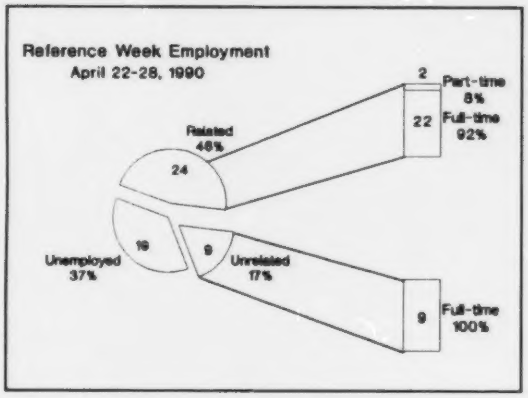
Electrical (Basic)

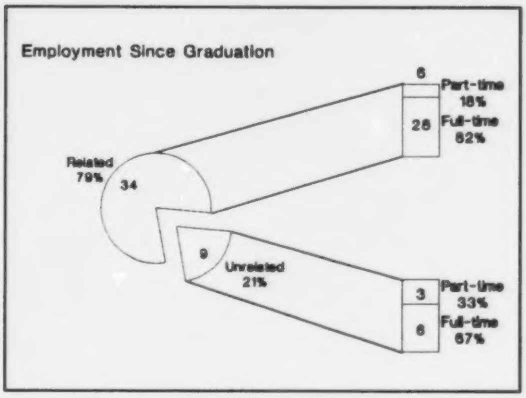
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Fisher Institute of Applied Arts and Technology, Avalon Community College (Seal Cove, Placentia), Eastern Community College (Burin, Clarenville), Central Newfoundland Community College (Grand Falls), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	86	57	69.5	36	63.2	21	4	8	3
1987-88	99	63	63.6	35	55.6	21	1	8	5
1988-89	107	72	69.9	54	75.0	31	2	19	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	2	5.4
$6.01 - $8.00	19	51.4
$8.01 - $10.00	6	16.2
$10.01 - $12.00	4	10.8
$12.01 - $14.00	4	10.8
$14.01 - $16.00	2	5.4
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	26	61.9
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	4	9.5
SALES	3	7.1
OTHER	9	21.4
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	8	19.5
1 MONTH	14	34.1
2-3 MONTHS	11	26.8
4-6 MONTHS	5	12.2
MORE THAN 6 MONTHS	3	7.3
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	48	88.9
OUT OF PROVINCE	6	11.1
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

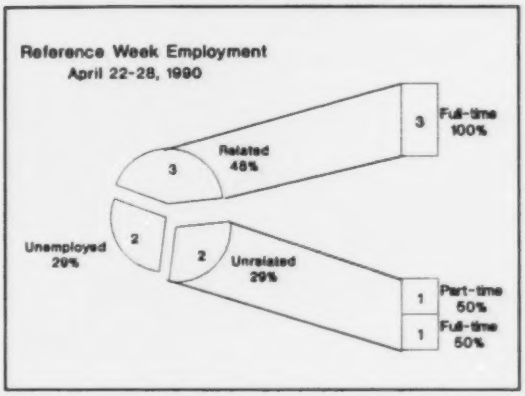
Electronic Service Technician (Home Entertainment)

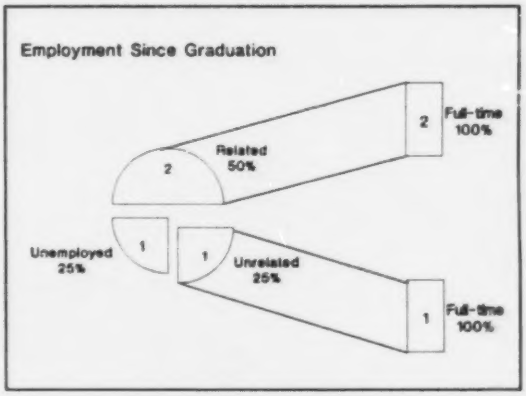
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	N/A	0	N/A	0	0	0	0
1987-88	16	12	75.0	5	41.7	4	0	0	1
1988-89	13	9	69.2	7	77.8	4	1	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	33.3
$8.01 - $10.00	2	66.7
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	2	40.0
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	2	40.0
CLERICAL & RELATED	1	20.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	2	100
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	6	85.7
OUT OF PROVINCE	1	14.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

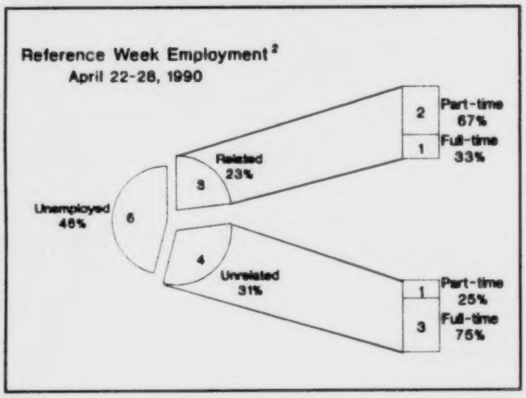
Electronics (Basic)

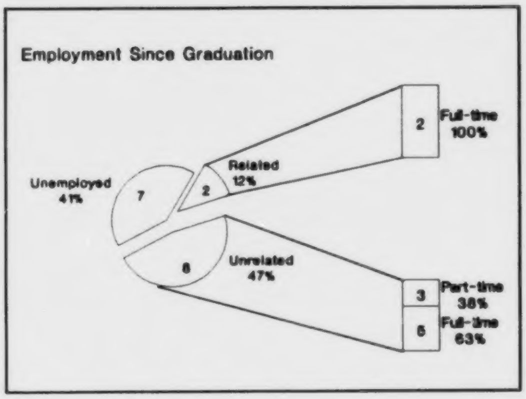
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology, Avalon Community College (Carbonear)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	76	31	57.4	14	45.2	7	3	1	3
1987-88	60	33	55.9	24	72.7	4	2	3	15
1988-89	43	27	65.9	23	85.2	4	4	6	9

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	2	50.0
$6.01 - $8.00	1	25.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	25.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	4	40.0
CLERICAL & RELATED	3	30.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	10.0
OTHER	2	20.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	66.7
1 MONTH	3	33.3
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	23	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).
2. 1 worked part-time in reference week but did not specify relationship between job and training.

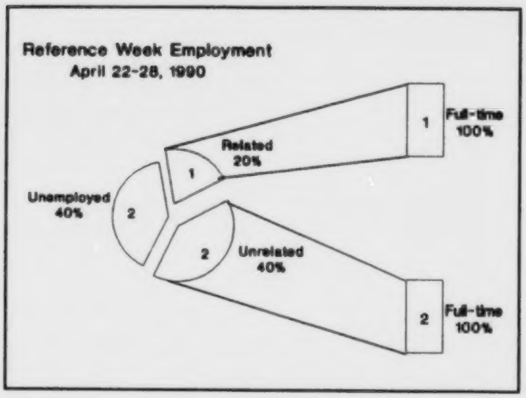
Electronics Communications Technician

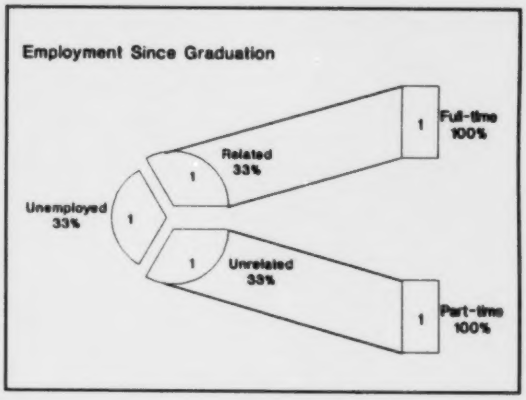
Program Duration: 1 Year **Award:** Diploma of Technology

Program Locations: Central Newfoundland Community College (Gander)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	14	11	78.6	6	54.5	5	0	0	1
1987-88	15	14	93.3	7	50.0	7	0	0	0
1988-89	13	8	88.9	5	62.5	3	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	100
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
SALES	1	33.3
SERVICE	1	33.3
CONSTRUCTION TRADES	1	33.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	1	50.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	50.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	5	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

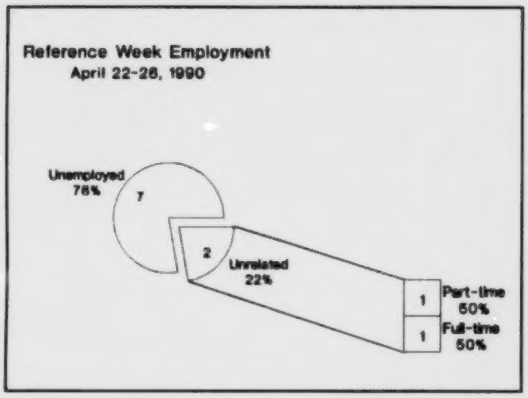
Forest Ranger

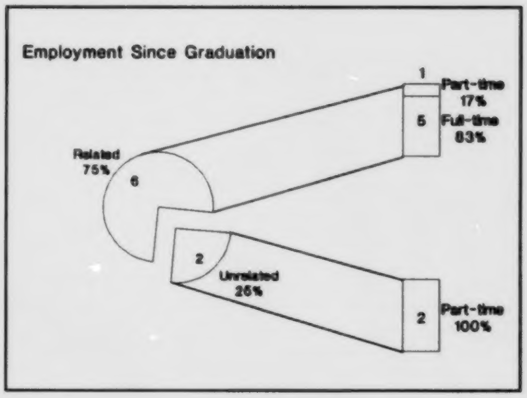
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	22	15	71.4	10	66.7	5	1	3	1
1987-88	25	9	64.3	6	66.7	0	0	3	3
1988-89	23	11	78.6	9	81.8	1	1	7	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	50.0
$8.01 - $10.00	1	16.7
$10.01 - $12.00	1	16.7
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	16.7
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
SERVICE	2	40.0
CLERICAL & RELATED	1	20.0
FORESTRY & LOGGING	1	20.0
OTHER	1	20.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	50.0
1 MONTH	2	25.0
2-3 MONTHS	1	12.5
4-6 MONTHS	1	12.5
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	8	88.9
OUT OF PROVINCE	1	11.1
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

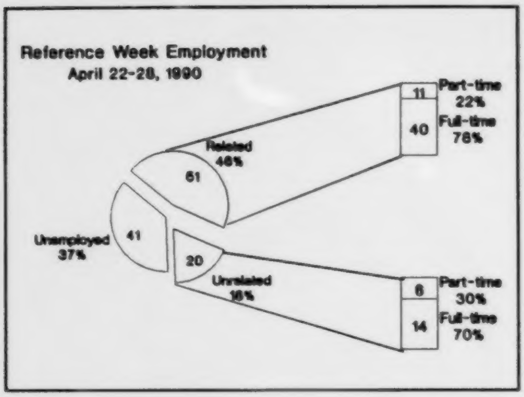
Hairstylist

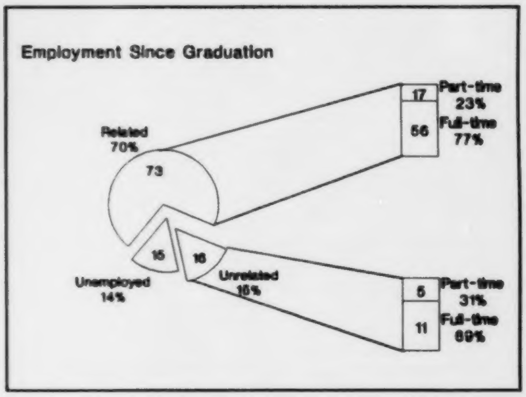
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Avalon Community College (Carbonear, Seal Cove), Eastern Community College (Bonavista, Burin), Western Community College (Stephenville, St. Anthony), Central Newfoundland Community College (Baie Verte, Gander, Grand Falls), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	191	145	81.5	81	55.9	33	22	10	16
1987-88	243	162	75.3	76	46.9	33	11	17	15
1988-89	235	156	74.3	124	79.5	54	17	41	12

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	38	82.6
$6.01 - $8.00	3	6.5
$8.01 - $10.00	4	8.7
$10.01 - $12.00	1	2.2
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	28	

OCCUPATIONS	#	%
SERVICE	55	75.3
CLERICAL & RELATED	9	12.3
MANAGERIAL, ADMINISTRATIVE & RELATED	4	5.5
OTHER	5	6.8
UNSPECIFIED	2	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	44	55.0
1 MONTH	11	13.8
2-3 MONTHS	9	11.3
4-6 MONTHS	10	12.5
MORE THAN 6 MONTHS	6	7.5
UNSPECIFIED	9	

RESIDENCE	#	%
NEWFOUNDLAND	115	92.7
OUT OF PROVINCE	9	7.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

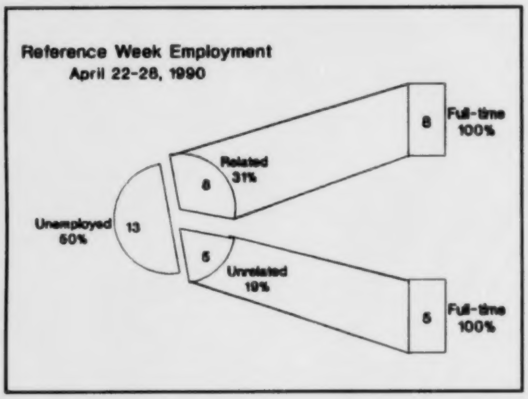
Heavy Duty Repair

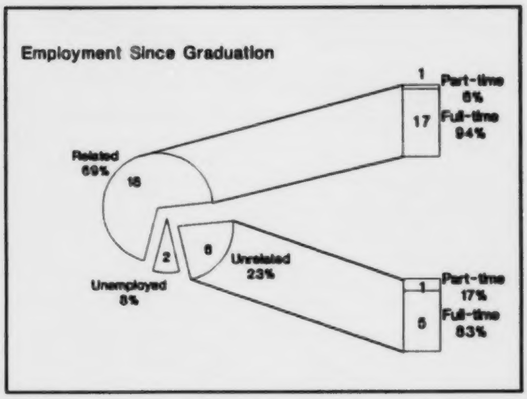
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Eastern Community College (Clarenville), Western Community College (Stephenville), Central Newfoundland Community College (Baie Verte, Grand Falls), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	56	43	79.6	26	60.5	11	3	8	4
1987-88	65	38	61.3	27	71.1	12	2	12	1
1988-89	63	40	65.6	27	67.5	13	0	13	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	18.8
$6.01 - $8.00	1	6.3
$8.01 - $10.00	3	18.8
$10.01 - $12.00	4	25.0
$12.01 - $14.00	3	18.8
$14.01 - $16.00	1	6.3
$16.01 OR MORE	1	6.3
UNSPECIFIED	0	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	11	52.4
TRANSPORT EQUIPMENT OPERATING	2	9.5
SOCIAL SCIENCES & RELATED	1	4.8
OTHER	7	33.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	7	31.8
1 MONTH	4	18.2
2-3 MONTHS	5	22.7
4-6 MONTHS	4	18.2
MORE THAN 6 MONTHS	2	9.1
UNSPECIFIED	3	

RESIDENCE	#	%
NEWFOUNDLAND	22	81.5
OUT OF PROVINCE	5	18.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

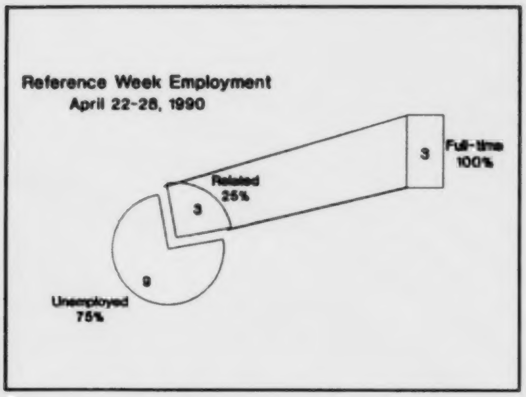
Heavy Equipment Operator

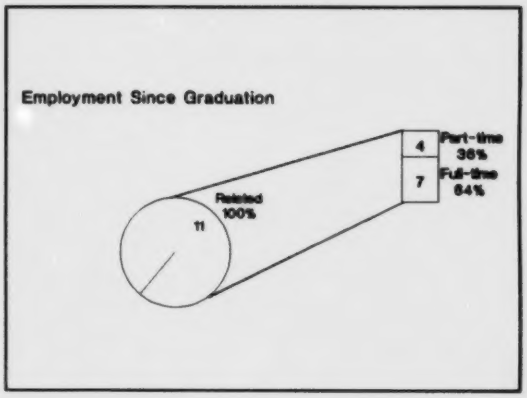
Program Duration: 6 Months **Award:** Certificate of Vocational Education

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	45	19	63.3	11	57.9	1	0	6	4
1987-88	49	15	57.7	7	46.7	1	1	4	1
1988-89	46	15	51.7	13	86.7	3	0	9	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	10.0
$8.01 - $10.00	2	20.0
$10.01 - $12.00	5	50.0
$12.01 - $14.00	2	20.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	4	57.1
FARMING, HORTICULTURAL & ANIMAL-HUSBANDRY	1	14.3
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	1	14.3
OTHER	1	14.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	20.0
1 MONTH	4	40.0
2-3 MONTHS	1	10.0
4-6 MONTHS	2	20.0
MORE THAN 6 MONTHS	1	10.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	9	69.2
OUT OF PROVINCE	4	30.8
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

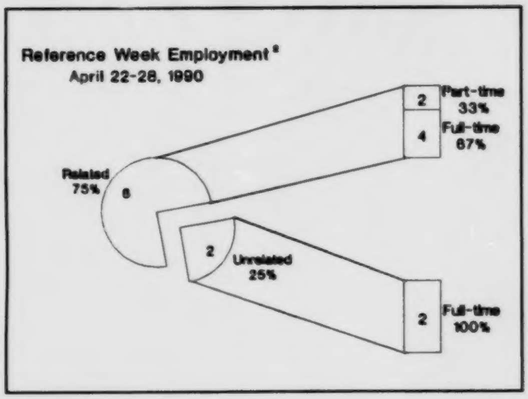
Hotel/Motel Restaurant Operations

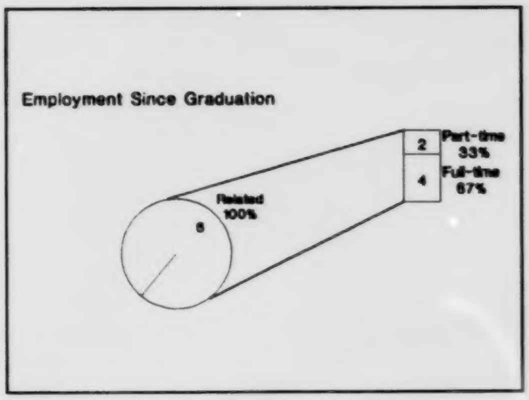
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	20	13	92.9	6	46.2	3	1	2	0
1987-88	19	8	47.1	5	62.5	2	1	1	1
1988-89	19	13	68.4	9	69.2	7	2	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	16.7
$6.01 - $8.00	4	66.7
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	16.7
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	3	50.0
CLERICAL & RELATED	1	16.7
SALES	1	16.7
OTHER	1	16.7
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	5	83.3
1 MONTH	0	0.0
2-3 MONTHS	1	16.7
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	8	88.9
OUT OF PROVINCE	1	11.1
UNSPECIFIED	0	

FOOTNOTES - Refer tc Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).
2. 1 worked full-time in reference week but did not specify relationship between job and training.

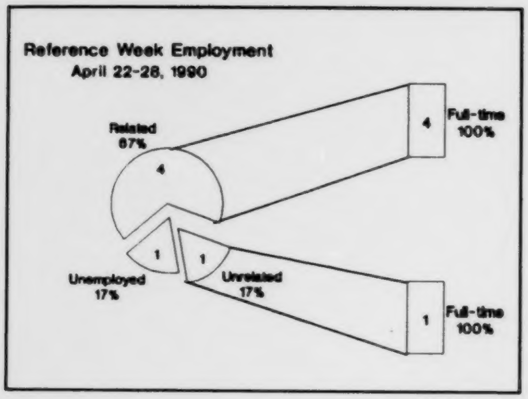
Industrial Electronics

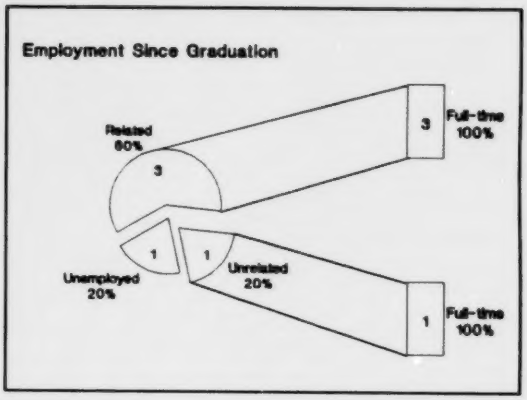
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	5	3	100	0	0.0	0	0	0	0
1987-88	16	6	37.5	2	33.3	2	0	0	0
1988-89	14	10	71.4	7	70.0	5	0	1	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	2	50.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	25.0
$12.01 - $14.00	1	25.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	2	33.3
CONSTRUCTION TRADES	2	33.3
SALES	1	16.7
OTHER	1	16.7
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	25.0
1 MONTH	0	0.0
2-3 MONTHS	2	50.0
4-6 MONTHS	1	25.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	7	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

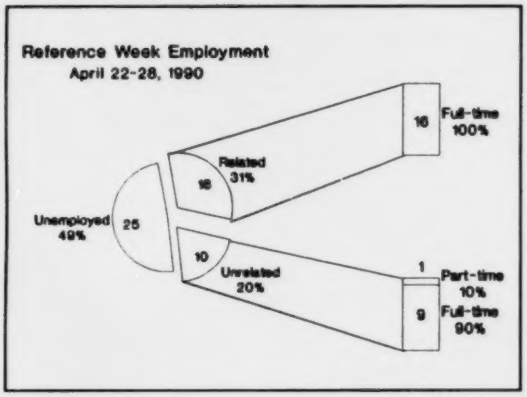
Industrial Mechanical (Millwright)

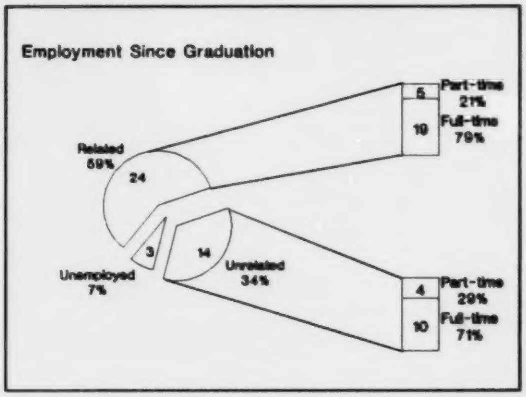
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Eastern Community College (Burin), Central Newfoundland Community College (Baie Verte, Grand Falls), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	58	36	63.2	14	38.9	9	1	3	1
1987-88	61	48	80.0	21	43.8	8	1	8	4
1988-89	76	66	86.8	51	77.3	25	1	25	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	13.6
$8.01 - $10.00	1	4.5
$10.01 - $12.00	4	18.2
$12.01 - $14.00	5	22.7
$14.01 - $16.00	2	9.1
$16.01 OR MORE	7	31.8
UNSPECIFIED	2	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	18	52.9
PROCESSING	3	8.8
SALES	2	5.9
OTHER	11	32.4
UNSPECIFIED	3	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	5	15.2
1 MONTH	11	33.3
2-3 MONTHS	9	27.3
4-6 MONTHS	4	12.1
MORE THAN 6 MONTHS	4	12.1
UNSPECIFIED	5	

RESIDENCE	#	%
NEWFOUNDLAND	41	80.4
OUT OF PROVINCE	10	19.6
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

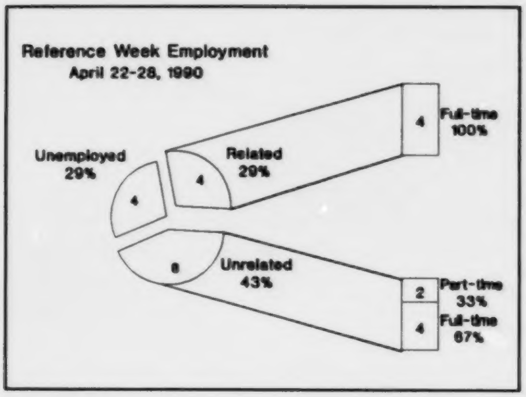
Machinist

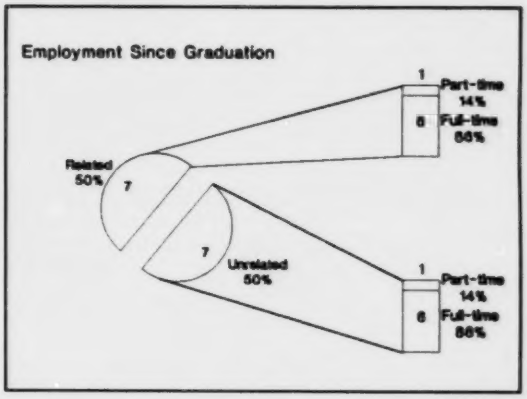
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Avalon Community College (Bell Island), Central Newfoundland Community College (Gander)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	38	29	80.6	16	55.2	6	1	6	3
1987-88	36	24	66.7	9	37.5	2	1	6	0
1988-89	32	21	65.6	15	71.4	8	2	4	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	20.0
$6.01 - $8.00	2	40.0
$8.01 - $10.00	1	20.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	20.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	3	25.0
MACHINING & RELATED	3	25.0
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	2	16.7
OTHER	4	33.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	46.2
1 MONTH	3	23.1
2-3 MONTHS	2	15.4
4-6 MONTHS	2	15.4
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	14	93.3
OUT OF PROVINCE	1	6.7
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

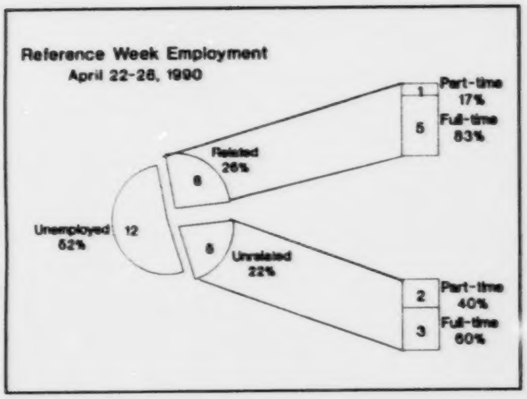
Marine Diesel Mechanic

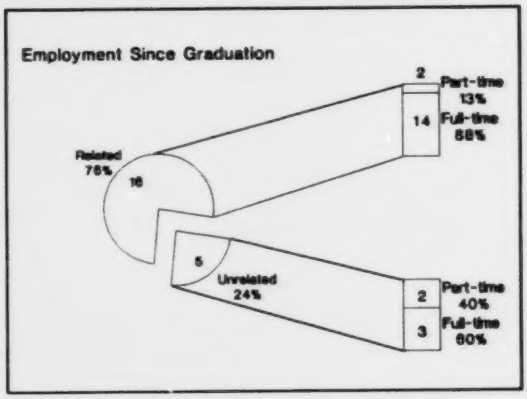
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology, Eastern Community College (Burin)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	153	46	42.2	19	41.3	9	4	4	2
1987-88	82	73	89.0	28	38.4	10	1	14	3
1988-89	66	43	65.2	25	58.1	8	3	12	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	4	36.4
$8.01 - $10.00	3	27.3
$10.01 - $12.00	2	18.2
$12.01 - $14.00	0	0.0
$14.01 - $16.00	2	18.2
$16.01 OR MORE	0	0.0
UNSPECIFIED	5	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	5	35.7
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	2	14.3
SERVICE	2	14.3
OTHER	5	35.7
UNSPECIFIED	2	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	31.6
1 MONTH	6	31.6
2-3 MONTHS	4	21.1
4-6 MONTHS	1	5.3
MORE THAN 6 MONTHS	2	10.5
UNSPECIFIED	5	

RESIDENCE	#	%
NEWFOUNDLAND	22	88.0
OUT OF PROVINCE	3	12.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

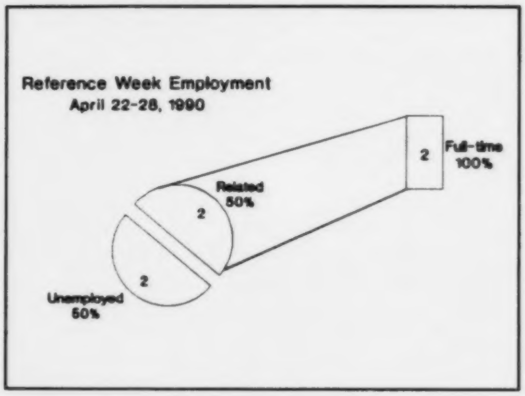
Marine Electrical Practice

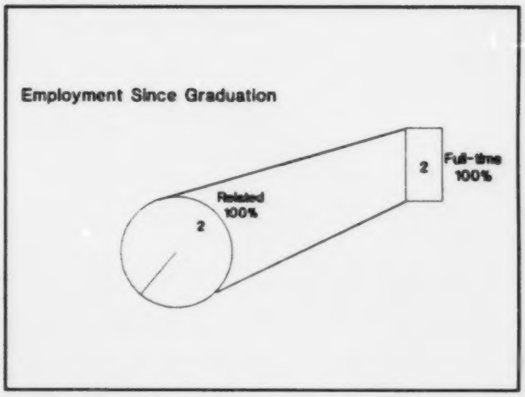
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	12	9	75.0	4	44.4	1	1	1	1
1987-88	15	13	86.7	8	61.5	2	0	4	2
1988-89	17	8	47.1	4	50.0	2	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	2	50.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	25.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	25.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	25.0
SALES	1	25.0
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	1	25.0
OTHER	1	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	1	50.0
2-3 MONTHS	0	0.0
4-6 MONTHS	1	50.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	4	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

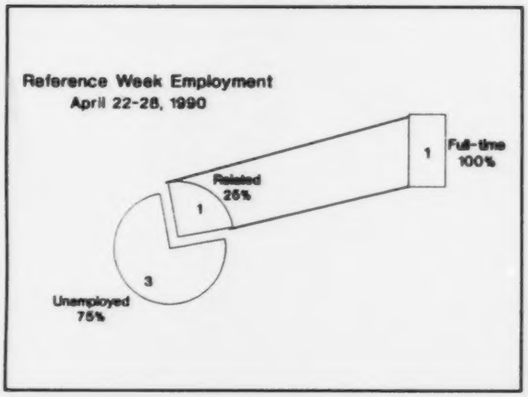
Marine Electrical Technician

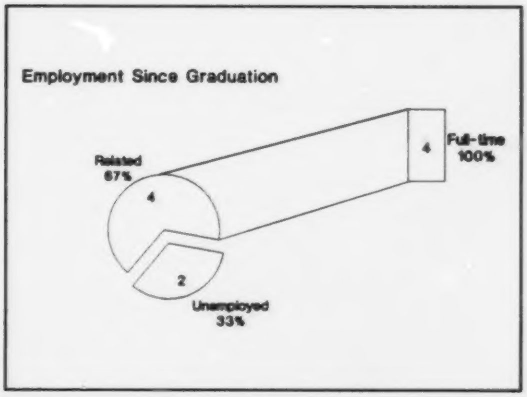
Program Duration: Varies **Award:** Certificate of Achievement

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1987-88	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	10	8	80.0	6	75.0	1	0	3	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	2	66.7
$16.01 OR MORE	1	33.3
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	33.3
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	1	33.3
CONSTRUCTION TRADES	1	33.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	66.7
1 MONTH	1	33.3
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	6	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

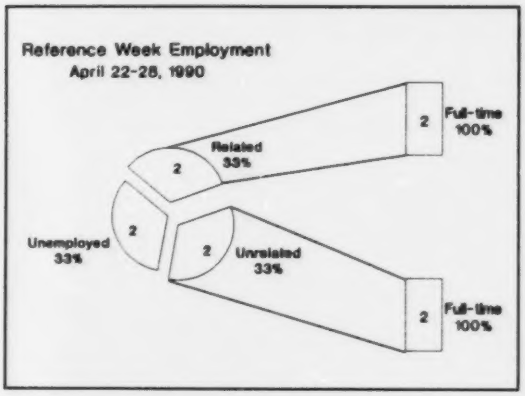
Marine Steelwork

Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	N/A	0	N/A	0	0	0	0
1987-88	11	6	54.5	3	50.0	1	0	2	0
1988-89	16	13	81.3	7	53.8	4	0	2	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES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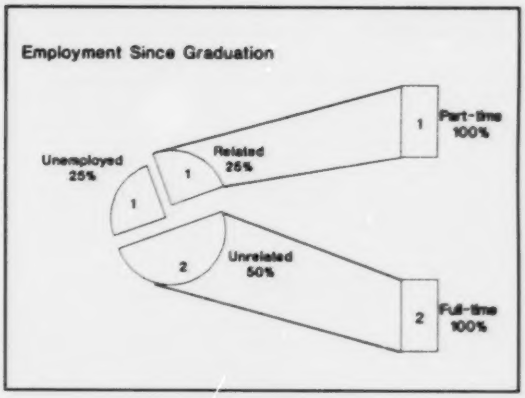
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	100
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
MACHINING & RELATED	2	40.0
SERVICE	1	20.0
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	1	20.0
OTHER	1	20.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	50.0
1 MONTH	1	50.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	6	85.7
OUT OF PROVINCE	1	14.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

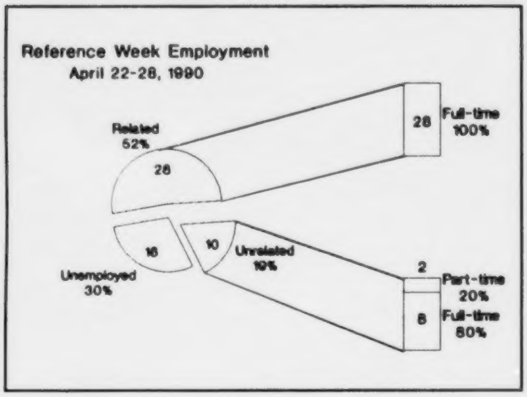
Motor Vehicle Repairer

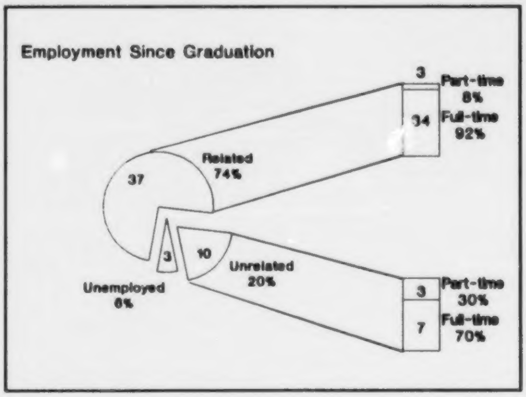
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Avalon Community College (Bell Island, Carbonear, Seal Cove, Placentia), Eastern Community College (Burin), Western Community College (Stephenville), Central Newfoundland Community College (Gander, Lewisporte, Springdale), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	144	77	55.8	51	66.2	25	8	8	10
1987-88	156	85	57.8	46	54.1	24	2	10	10
1988-89	150	81	60.9	60	74.1	36	2	16	6

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	10	28.6
$6.01 - $8.00	16	45.7
$8.01 - $10.00	5	14.3
$10.01 - $12.00	2	5.7
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	2.9
$16.01 OR MORE	1	2.9
UNSPECIFIED	5	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	33	68.8
SALES	4	8.3
SERVICE	3	6.3
OTHER	8	16.7
UNSPECIFIED	4	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	17	40.5
1 MONTH	9	21.4
2-3 MONTHS	11	26.2
4-6 MONTHS	3	7.1
MORE THAN 6 MONTHS	2	4.8
UNSPECIFIED	5	

RESIDENCE	#	%
NEWFOUNDLAND	55	91.7
OUT OF PROVINCE	5	8.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

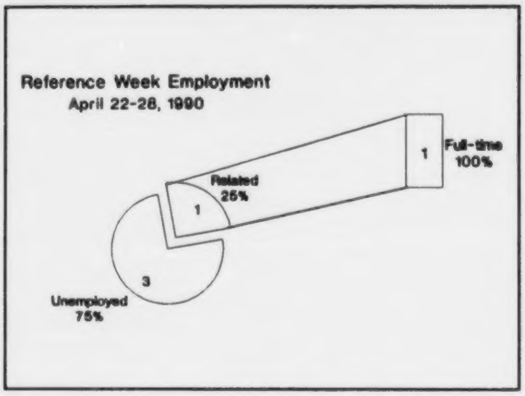
Non-Destructive Testing

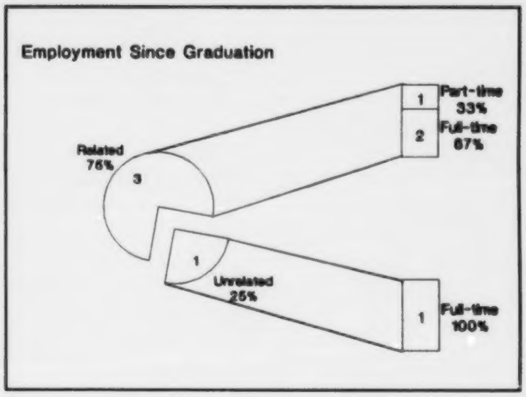
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Western Community College (Port Aux Basques)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1987-88	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	12	9	75.0	4	44.4	1	0	3	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	50.0
$16.01 OR MORE	1	50.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	2	66.7
FORESTRY & LOGGING	1	33.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	1	25.0
2-3 MONTHS	2	50.0
4-6 MONTHS	1	25.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	3	75.0
OUT OF PROVINCE	1	25.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

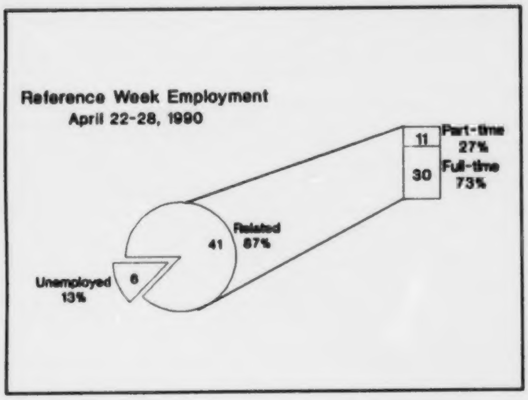
Nursing Assistant

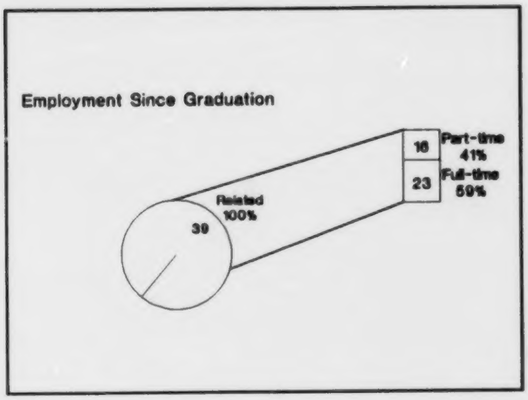
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology, Eastern Community College (Bonavista)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	150	27	90.0	12	44.4	9	2	0	1
1987-88	94	27	48.2	16	59.3	12	3	1	0
1988-89	126	57	65.5	48	84.2	30	11	6	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	2.1
$8.01 - $10.00	2	4.3
$10.01 - $12.00	44	93.6
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
MEDICINE & HEALTH	31	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	23	59.0
1 MONTH	10	25.6
2-3 MONTHS	2	5.1
4-6 MONTHS	4	10.3
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	48	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

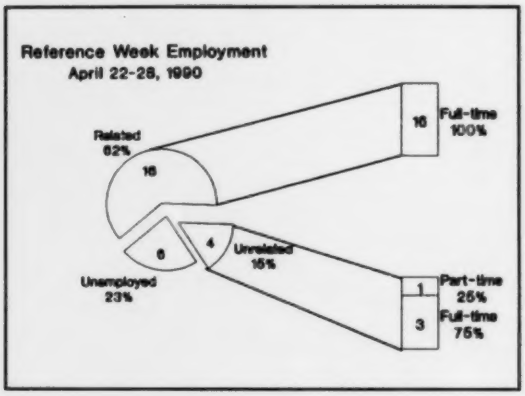
Operating Lineman

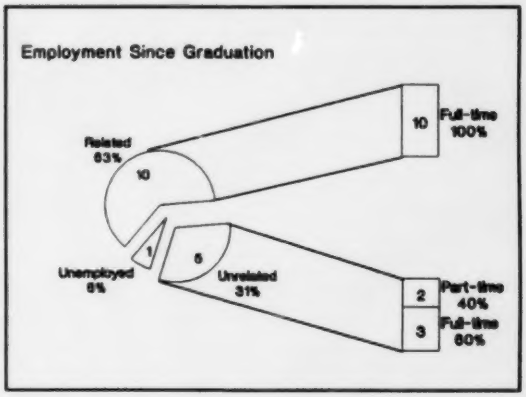
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Avalon Community College (Seal Cove), Western Community College (Stephenville), Central Newfoundland Community College (Springdale), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	65	61	96.8	28	45.9	19	4	4	1
1987-88	55	44	83.0	25	56.8	13	2	9	1
1988-89	51	43	84.3	27	62.8	19	1	6	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	1	5.9
$6.01 - $8.00	0	0.0
$8.01 - $10.00	3	17.6
$10.01 - $12.00	4	23.5
$12.01 - $14.00	6	35.3
$14.01 - $16.00	2	11.8
$16.01 OR MORE	1	5.9
UNSPECIFIED	1	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	16	80.0
CLERICAL & RELATED	2	10.0
SALES	1	5.0
OTHER	1	5.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	14.3
1 MONTH	5	35.7
2-3 MONTHS	4	28.6
4-6 MONTHS	1	7.1
MORE THAN 6 MONTHS	2	14.3
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	24	88.9
OUT OF PROVINCE	3	11.1
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

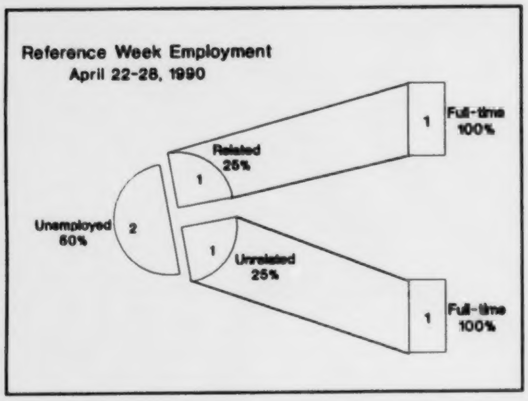
Plumbing & Domestic Heating

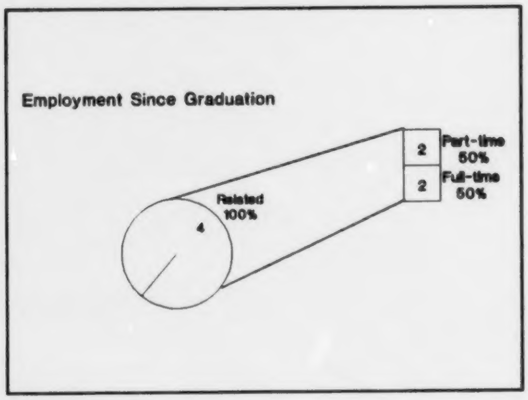
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	16	9	81.8	3	33.3	3	0	0	0
1987-88	21	16	76.2	6	37.5	2	1	2	1
1988-89	16	14	87.5	5	35.7	2	0	2	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	50.0
$10.01 - $12.00	1	50.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	3	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	1	50.0
2-3 MONTHS	0	0.0
4-6 MONTHS	1	50.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	5	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

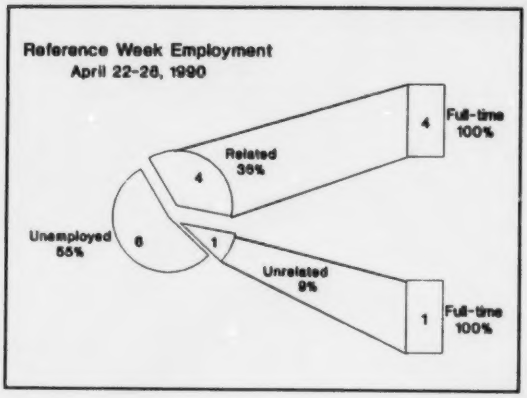
Power Engineering

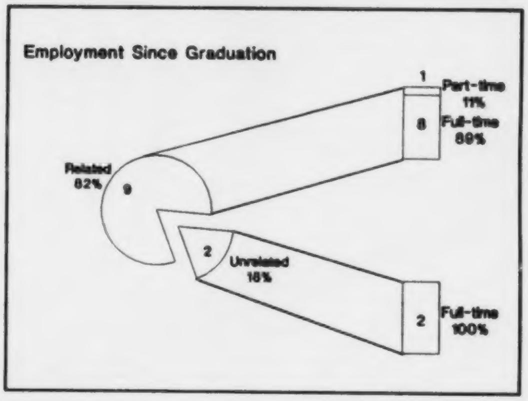
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	59	26	100	18	69.2	9	5	3	1
1987-88	51	17	44.7	8	47.1	3	0	3	2
1988-89	50	17	47.2	12	70.6	5	0	6	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	11.1
$8.01 - $10.00	0	0.0
$10.01 - $12.00	3	33.3
$12.01 - $14.00	4	44.4
$14.01 - $16.00	1	11.1
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
OTHER CRAFTS & EQUIPMENT OPERATING	7	63.6
SALES	2	18.2
MINING & QUARRYING (INC OIL & GAS)	1	9.1
OTHER	1	9.1
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	18.2
1 MONTH	8	72.7
2-3 MONTHS	1	9.1
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	10	83.3
OUT OF PROVINCE	2	16.7
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

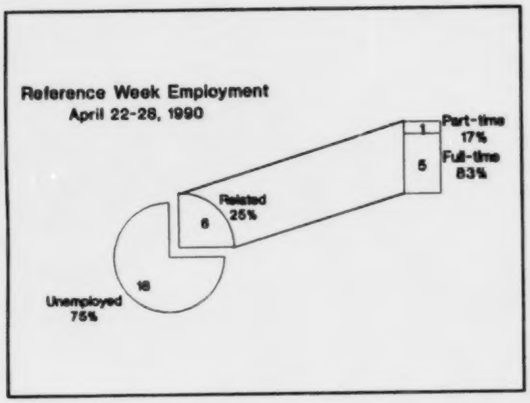
Refrigeration Plant Operator

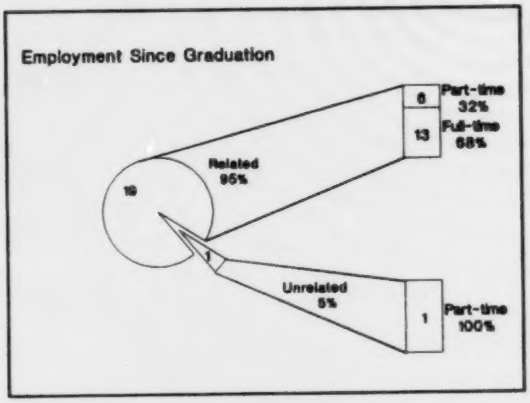
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology, Eastern Community College (Burin)

ACADEMIC YEAR	ENROLMENTS	GRADUATES #	GRADUATES %[1]	RESPONDENTS #	RESPONDENTS %	EMPLOYMENT IN REFERENCE WEEK FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	29	22	81.5	11	50.0	7	0	2	2
1987-88	32	26	81.3	15	57.7	8	0	7	0
1988-89	37	28	77.8	24	85.7	5	1	18	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	2	11.1
$8.01 - $10.00	5	27.8
$10.01 - $12.00	8	44.4
$12.01 - $14.00	3	16.7
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	4	

OCCUPATIONS	#	%
OTHER CRAFTS & EQUIPMENT OPERATING	7	58.3
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	2	16.7
PROCESSING	1	8.3
OTHER	2	16.7
UNSPECIFIED	3	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	10	62.5
1 MONTH	4	25.0
2-3 MONTHS	2	12.5
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	4	

RESIDENCE	#	%
NEWFOUNDLAND	22	91.7
OUT OF PROVINCE	2	8.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

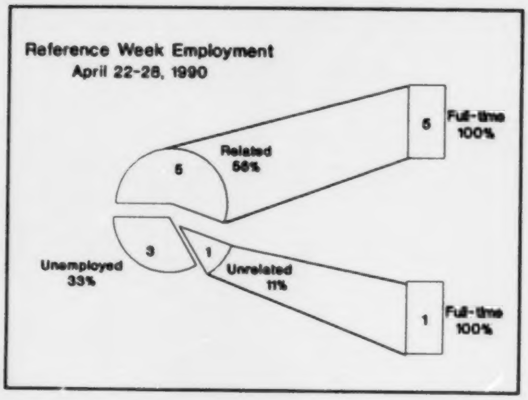
Sheet Metal Worker

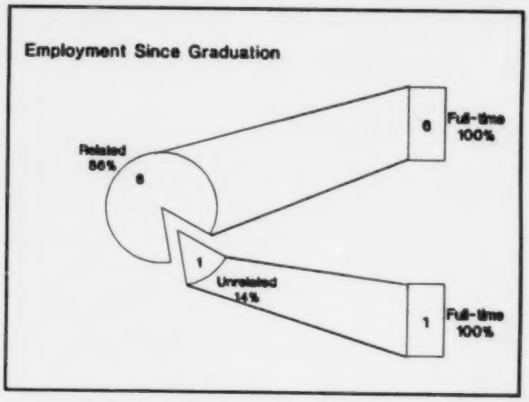
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	8	7	100	5	71.4	1	1	1	2
1987-88	8	6	75.0	4	66.7	3	0	1	0
1988-89	10	9	90.0	9	100	6	0	3	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	37.5
$8.01 - $10.00	3	37.5
$10.01 - $12.00	2	25.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
MACHINING & RELATED	8	88.9
SALES	1	11.1
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	57.1
1 MONTH	2	28.6
2-3 MONTHS	0	0.0
4-6 MONTHS	1	14.3
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	9	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

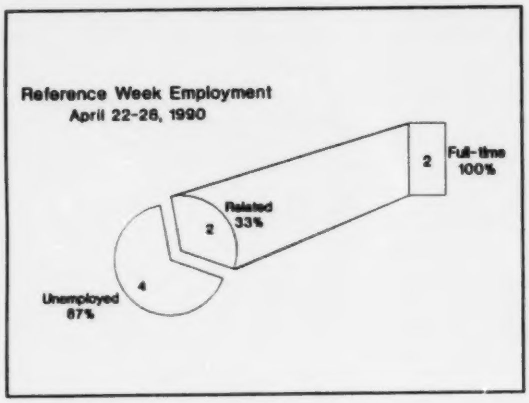
Small Equipment Repair

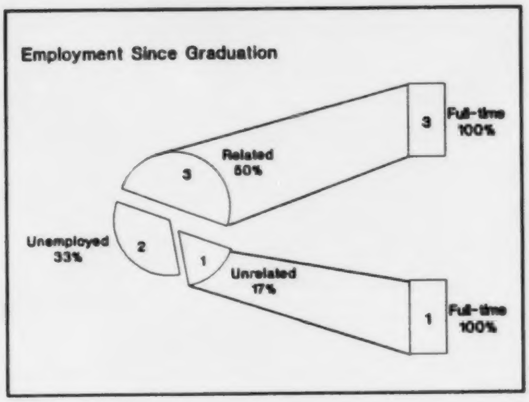
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Eastern Community College (Bonavista), Western Community College (St. Anthony), Central Newfoundland Community College (Lewisporte)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	18	12	75.0	6	50.0	3	0	2	1
1987-88	24	16	66.7	7	43.8	3	0	2	2
1988-89	20	8	44.4	7	87.5	2	0	4	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	33.3
$6.01 - $8.00	2	66.7
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	2	50.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	25.0
MEDICINE & HEALTH	1	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	33.3
1 MONTH	1	33.3
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	33.3
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	7	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

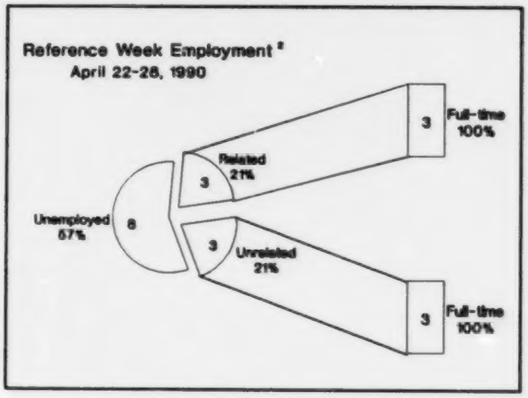
Steamfitter-Pipefitter

Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

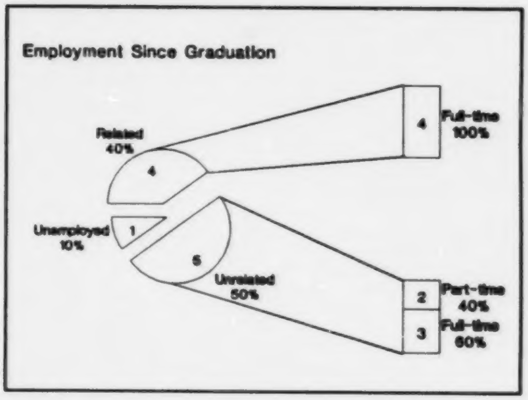
Program Locations: Eastern Community College (Clarenville), Western Community College (Stephenville), Central Newfoundland Community College (Grand Falls)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	37	21	58.3	11	52.4	5	0	5	1
1987-88	16	9	56.3	5	55.6	3	1	1	0
1988-89	37	18	51.4	15	83.3	7	0	8	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES



Reference Week Employment[2]
April 22-28, 1990



Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	16.7
$10.01 - $12.00	4	66.7
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	16.7
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CONSTRUCTION TRADES	3	30.0
SERVICE	2	20.0
CLERICAL & RELATED	1	10.0
OTHER	4	40.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	37.5
1 MONTH	3	37.5
2-3 MONTHS	2	25.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	14	93.3
OUT OF PROVINCE	1	6.7
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).
2. 1 worked full-time in reference week but did not specify relationship between job and training.

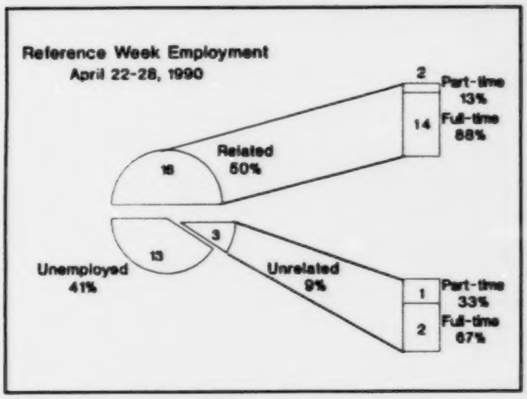
Stenographer Dicta-Typing

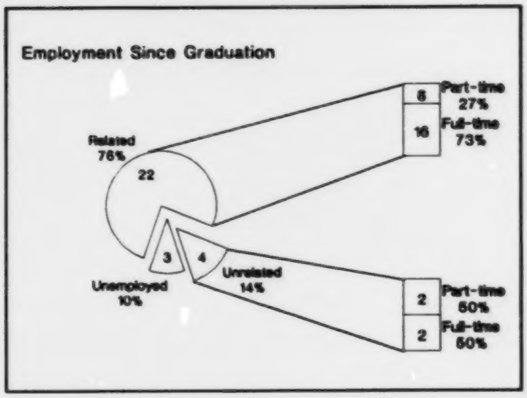
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Avalon Community College (Seal Cove), Western Community College (Stephenville, Port Aux Basques), Central Newfoundland Community College (Baie Verte, Grand Falls)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	54	32	66.7	15	46.9	8	0	3	4
1987-88	52	37	74.0	20	54.1	7	1	8	4
1988-89	88	49	66.2	35	71.4	16	3	13	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	10	40.0
$6.01 - $8.00	5	20.0
$8.01 - $10.00	4	16.0
$10.01 - $12.00	6	24.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
CLERICAL & RELATED	18	81.8
MANAGERIAL, ADMINISTRATIVE & RELATED	1	4.5
TEACHING & RELATED	1	4.5
OTHER	2	9.1
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	10	38.5
1 MONTH	10	38.5
2-3 MONTHS	3	11.5
4-6 MONTHS	3	11.5
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	28	80.0
OUT OF PROVINCE	7	20.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

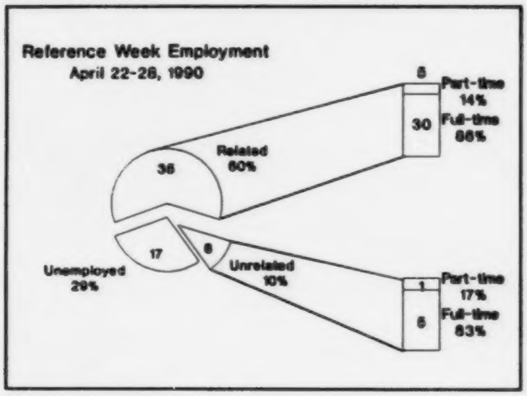
Stenographer Shorthand Typing

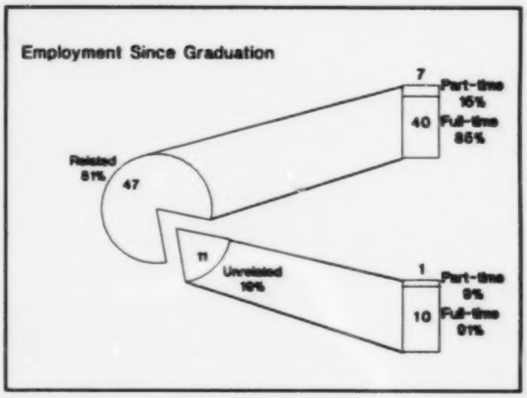
Program Duration: 1 Year **Award:** Certificate of Vocational Education

Program Locations: Cabot Institute of Applied Arts and Technology, Avalon Community College (Carbonear, Placentia), Eastern Community College (Burin, Clarenville), Western Community College (St. Anthony), Central Newfoundland Community College (Gander, Grand Falls), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	205	109	67.7	60	55.0	28	11	13	8
1987-88	195	102	57.3	61	59.8	32	1	17	11
1988-89	131	70	53.4	63	90.0	35	6	17	5

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	9	18.8
$6.01 - $8.00	14	29.2
$8.01 - $10.00	17	35.4
$10.01 - $12.00	8	16.7
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
CLERICAL & RELATED	41	83.7
SALES	3	6.1
MANAGERIAL, ADMINISTRATIVE & RELATED	1	2.0
OTHER	4	8.2
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	18	34.0
1 MONTH	12	22.6
2-3 MONTHS	13	24.5
4-6 MONTHS	5	9.4
MORE THAN 6 MONTHS	5	9.4
UNSPECIFIED	6	

RESIDENCE	#	%
NEWFOUNDLAND	61	96.8
OUT OF PROVINCE	2	3.2
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

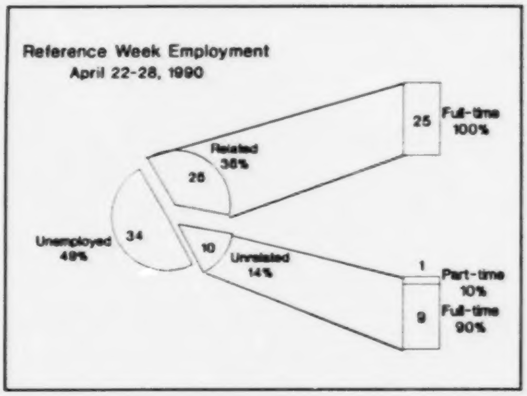
Welding

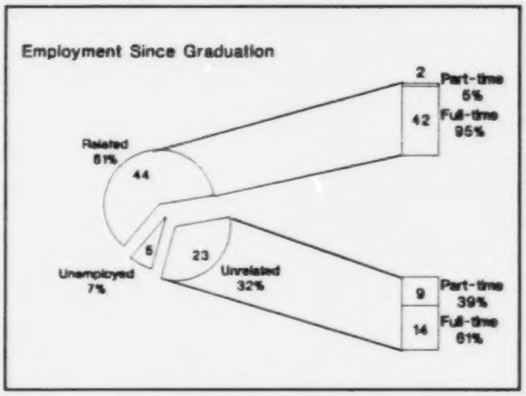
Program Duration: 1 Year **Award:** Certificate of Vocational Education (Leads to Apprenticeship)

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Avalon Community College (Carbonear, Seal Cove), Eastern Community College (Burin), Western Community College (Stephenville, Port Aux Basques), Central Newfoundland Community College (Baie Verte, Gander, Grand Falls, Lewisporte), Labrador Community College (Happy Valley)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	147	89	68.5	42	47.2	23	3	9	7
1987-88	195	125	66.8	74	59.2	33	3	28	10
1988-89	162	112	69.1	76	67.9	34	1	34	7

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	10	23.3
$8.01 - $10.00	18	41.9
$10.01 - $12.00	5	11.6
$12.01 - $14.00	5	11.6
$14.01 - $16.00	2	4.7
$16.01 OR MORE	3	7.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
MACHINING & RELATED	35	66.0
CONSTRUCTION TRADES	5	9.4
SALES	3	5.7
OTHER	10	18.9
UNSPECIFIED	3	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	14	23.3
1 MONTH	18	30.0
2-3 MONTHS	22	36.7
4-6 MONTHS	3	5.0
MORE THAN 6 MONTHS	3	5.0
UNSPECIFIED	7	

RESIDENCE	#	%
NEWFOUNDLAND	68	89.5
OUT OF PROVINCE	8	10.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

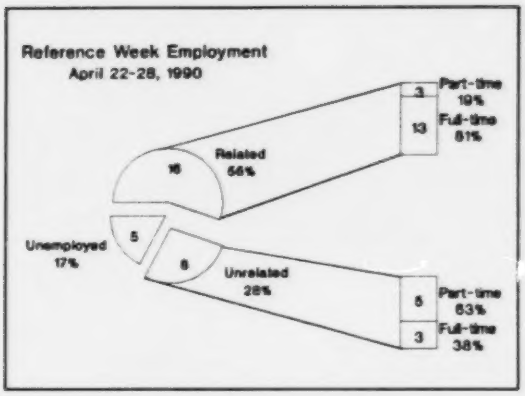
Word Processing Specialist

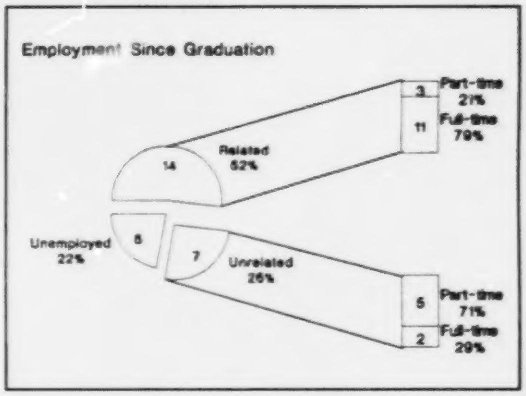
Program Duration: 5 Months **Award:** Certificate of Vocational Education

Program Locations: Avalon Community College (Bell Island, Carbonear), Eastern Community College (Burin)

ACADEMIC YEAR	ENROLMENTS	GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
		#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	N/A	0	N/A	0	0	0	0
1987-88	48	31	64.6	26	83.9	14	3	8	1
1988-89	49	38	77.6	32	84.2	16	8	5	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	[illegible]
$4.00 - $6.00	1	6.3
$6.01 - $8.00	3	18.8
$8.01 - $10.00	5	31.3
$10.01 - $12.00	5	31.3
$12.01 - $14.00	2	12.5
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
CLERICAL & RELATED	14	87.5
MANAGERIAL, ADMINISTRATIVE & RELATED	1	6.3
TEACHING & RELATED	1	6.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	15.0
1 MONTH	5	25.0
2-3 MONTHS	1	5.0
4-6 MONTHS	5	25.0
MORE THAN 6 MONTHS	6	30.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	32	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

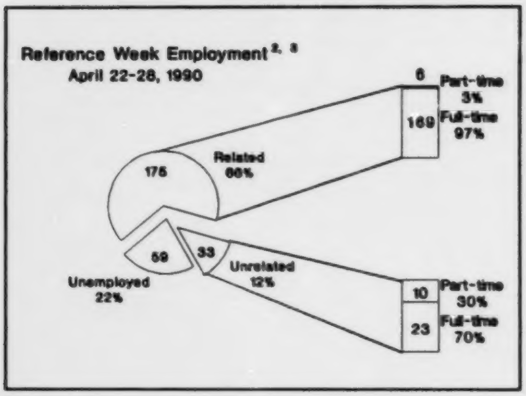
1. Graduation rate (GR) is calculated as the number of graduates (G) divided by enrolment (E) minus continuing students (C), i.e. GR = G / (E - C).

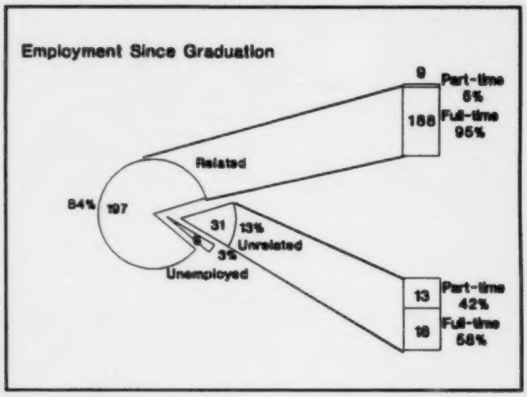
TWO YEAR COLLEGE PROGRAMS

All Two Year Programs

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	288	475	155	74.9	89	57.4	57	10	9	13
1987-88	819	564	344	81.3	191	55.5	116	16	33	26
1988-89	708	543	363	81.2	283	78.0	193	17	59	14

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	21	10.0
$6.01 - $8.00	35	16.6
$8.01 - $10.00	60	28.4
$10.01 - $12.00	61	28.9
$12.01 - $14.00	20	9.5
$14.01 - $16.00	8	3.8
$16.01 OR MORE	6	2.8
UNSPECIFIED	8	

OCCUPATIONS	#	%
CLERICAL & RELATED	95	40.4
SERVICE	26	11.1
MANAGERIAL, ADMINISTRATIVE & RELATED	25	10.6
OTHER	89	37.9
UNSPECIFIED	7	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	81	36.3
1 MONTH	60	26.9
2-3 MONTHS	50	22.4
4-6 MONTHS	19	8.5
MORE THAN 6 MONTHS	13	5.8
UNSPECIFIED	8	

RESIDENCE	#	%
NEWFOUNDLAND	242	85.5
OUT OF PROVINCE	41	14.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).
2. 1 worked full-time in reference week but did not specify relationship between job and training.
3. 1 worked part-time in reference week but did not specify relationship between job and training.

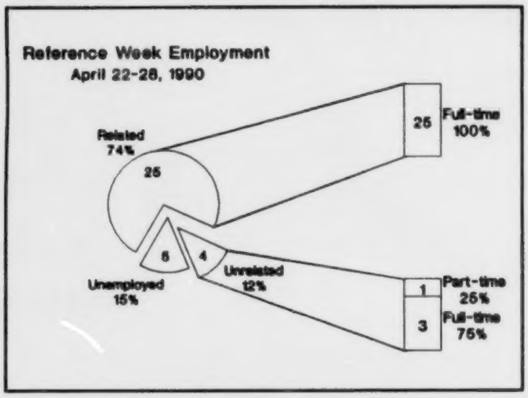
Accounting

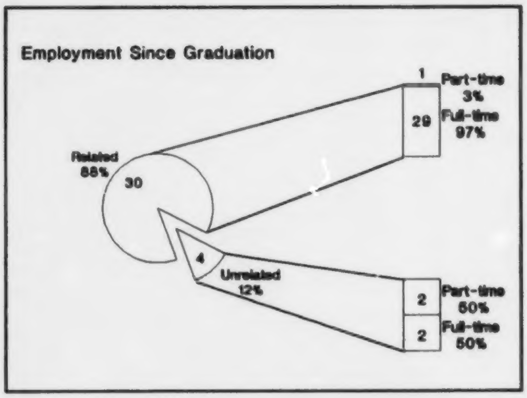
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology, Fisher Institute of Applied Arts and Technology, Central Newfoundland Community College (Grand Falls)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	54	109	17	39.5	9	52.9	5	0	3	1
1987-88	158	100	50	67.6	38	76.0	25	6	5	2
1988-89	65	79	47	73.4	37	78.7	28	1	5	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	10.3
$6.01 - $8.00	4	13.8
$8.01 - $10.00	11	37.9
$10.01 - $12.00	10	34.5
$12.01 - $14.00	1	3.4
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	22	64.7
MANAGERIAL, ADMINISTRATIVE & RELATED	9	26.5
SALES	2	5.9
OTHER	1	2.9
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	8	23.5
1 MONTH	8	23.5
2-3 MONTHS	8	23.5
4-6 MONTHS	7	20.6
MORE THAN 6 MONTHS	3	8.8
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	35	94.6
OUT OF PROVINCE	2	5.4
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

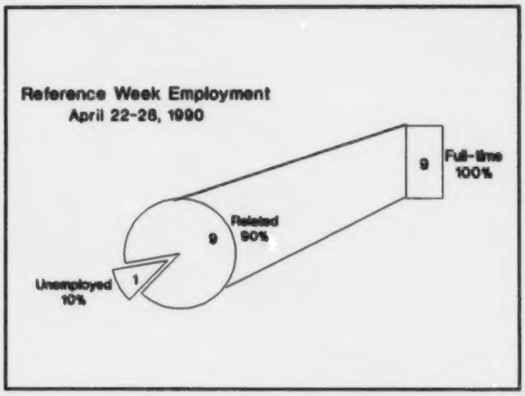
Aircraft Maintenance Engineering

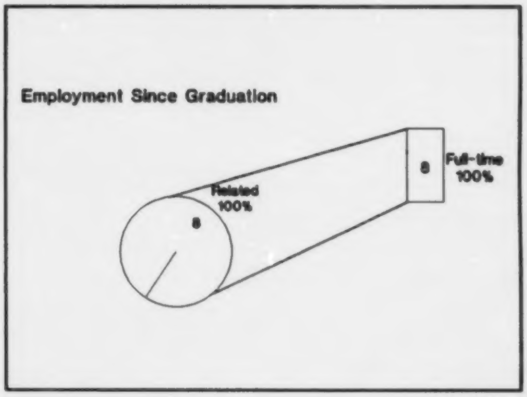
Program Duration: 2 Years **Award:** Diploma of Technology

Program Locations: Central Newfoundland Community College (Gander)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	16	16	16	100	8	50.0	8	0	0	0
1988-89	17	15	14	93.3	10	71.4	9	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	4	44.4
$10.01 - $12.00	4	44.4
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	11.1
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	9	90.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	10.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	75.0
1 MONTH	1	12.5
2-3 MONTHS	1	12.5
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	7	70.0
OUT OF PROVINCE	3	30.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

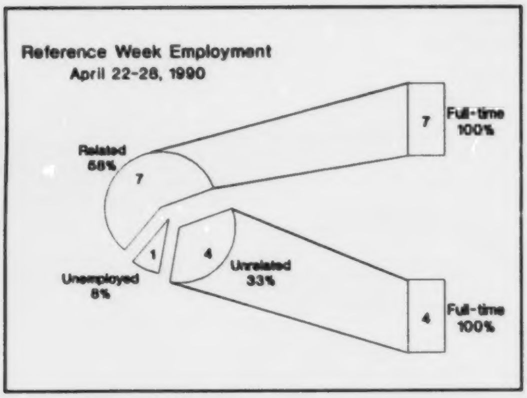
Business Administration

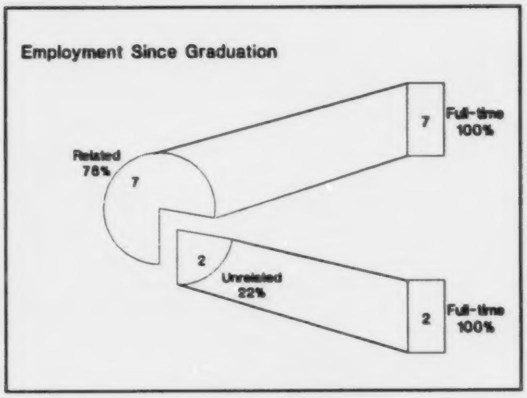
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	20	48	4	36.4	2	50.0	2	0	0	0
1987-88	31	28	14	77.8	9	64.3	7	0	1	1
1988-89	0	35	15	71.4	12	80.0	11	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	12.5
$6.01 - $8.00	2	25.0
$8.01 - $10.00	3	37.5
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	12.5
$14.01 - $16.00	1	12.5
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	4	33.3
CLERICAL & RELATED	2	16.7
SALES	2	16.7
OTHER	4	33.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	44.4
1 MONTH	2	22.2
2-3 MONTHS	1	11.1
4-6 MONTHS	1	11.1
MORE THAN 6 MONTHS	1	11.1
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	11	91.7
OUT OF PROVINCE	1	8.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

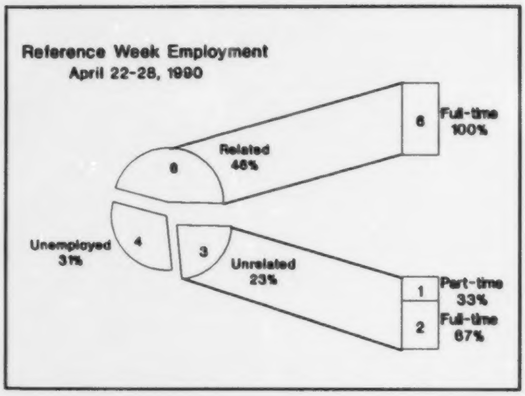
Business Computer and Computer Studies

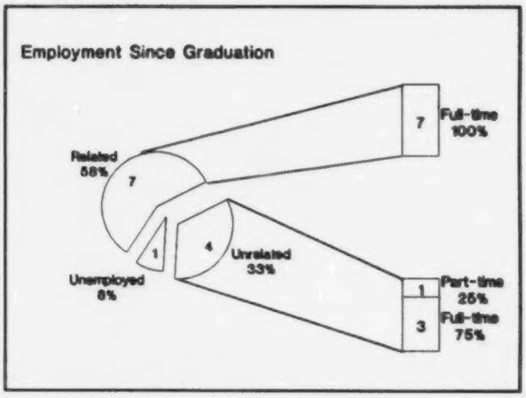
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Fisher Institute of Applied Arts and Technology, Central Newfoundland Community College (Grand Falls)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	27	12	5	41.7	2	40.0	1	1	0	0
1987-88	52	30	18	72.0	10	55.6	7	2	0	1
1988-89	57	33	17	58.6	14	82.4	8	1	4	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	2	25.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	25.0
$10.01 - $12.00	2	25.0
$12.01 - $14.00	2	25.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	5	45.5
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	3	27.3
MANAGERIAL, ADMINISTRATIVE & RELATED	1	9.1
OTHER	2	18.2
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	9.1
1 MONTH	1	9.1
2-3 MONTHS	4	36.4
4-6 MONTHS	4	36.4
MORE THAN 6 MONTHS	1	9.1
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	14	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

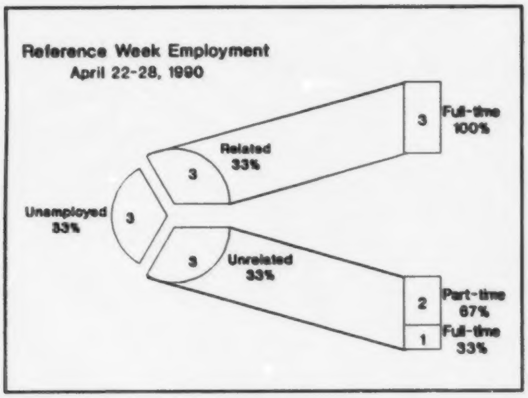
Community Recreation Leadership

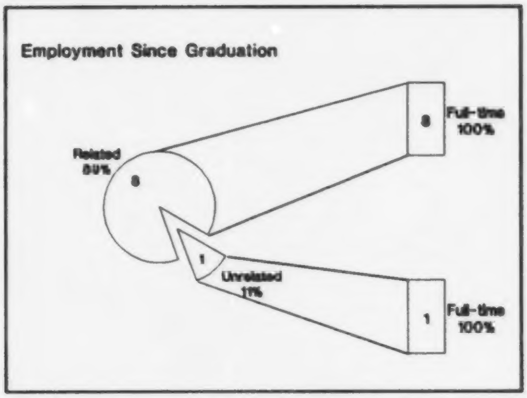
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	6	37	8	80.0	3	37.5	3	0	0	0
1987-88	25	25	19	86.4	4	21.1	3	1	0	0
1988-89	30	24	15	93.8	11	73.3	4	2	3	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	14.3
$6.01 - $8.00	5	71.4
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	14.3
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	3	42.9
SPORT & RECREATION	3	42.9
MEDICINE & HEALTH	1	14.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	50.0
1 MONTH	3	37.5
2-3 MONTHS	1	12.5
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	9	81.8
OUT OF PROVINCE	2	18.2
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

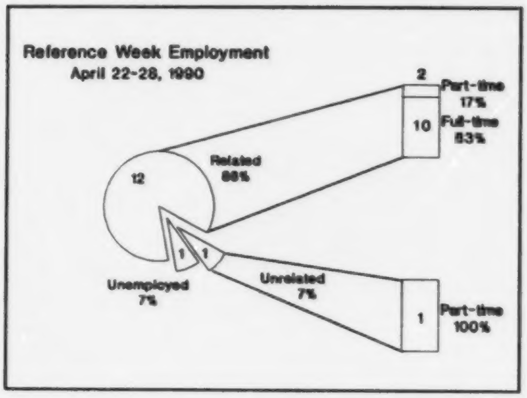
Community Studies

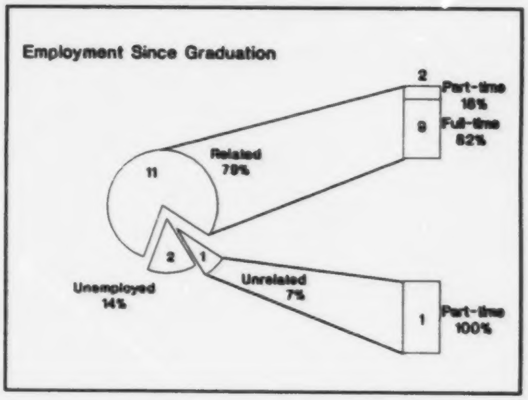
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	32	35	28	93.3	13	46.4	5	0	4	4
1988-89	38	24	22	95.7	16	72.7	10	3	1	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	7.7
$6.01 - $8.00	2	15.4
$8.01 - $10.00	4	30.8
$10.01 - $12.00	4	30.8
$12.01 - $14.00	2	15.4
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	4	36.4
MEDICINE & HEALTH	3	27.3
TEACHING & RELATED	2	18.2
OTHER	2	18.2
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	25.0
1 MONTH	4	33.3
2-3 MONTHS	4	33.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	8.3
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	11	68.8
OUT OF PROVINCE	5	31.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

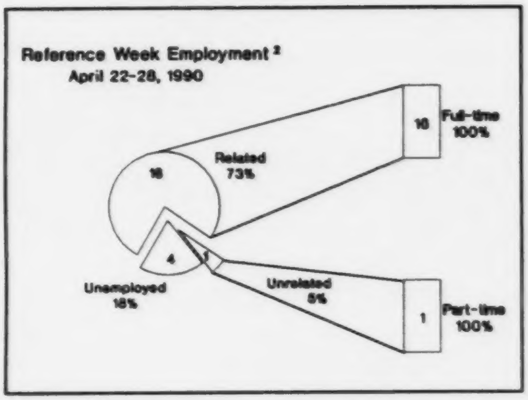
Computer Studies

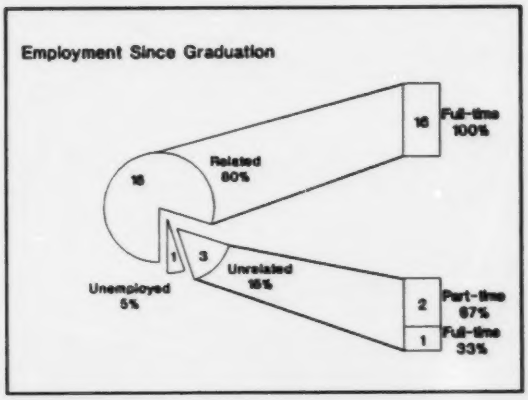
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	24	61	23	85.2	16	69.6	14	0	1	1
1987-88	128	38	17	77.3	9	52.9	5	0	3	1
1988-89	104	46	29	76.3	22	75.9	17	1	4	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	17.6
$8.01 - $10.00	5	29.4
$10.01 - $12.00	5	29.4
$12.01 - $14.00	2	11.8
$14.01 - $16.00	1	5.9
$16.01 OR MORE	1	5.9
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	13	76.5
CLERICAL & RELATED	3	17.6
SALES	1	5.9
UNSPECIFIED	2	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	8	42.1
1 MONTH	3	15.8
2-3 MONTHS	5	26.3
4-6 MONTHS	2	10.5
MORE THAN 6 MONTHS	1	5.3
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	19	86.4
OUT OF PROVINCE	3	13.6
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

2. 1 worked full-time in reference week but did not specify relationship between job and training.

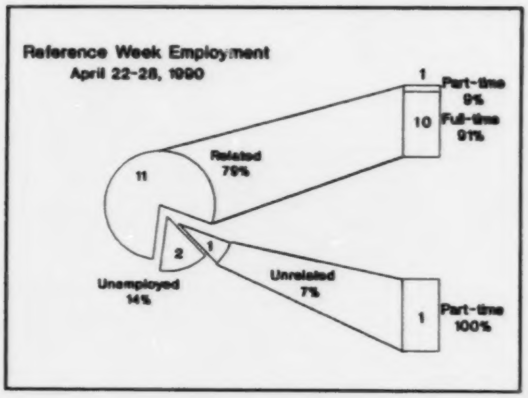
Early Childhood Education

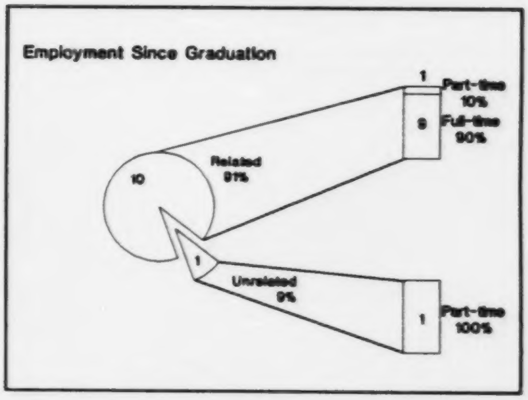
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	31	25	21	95.5	15	71.4	9	1	2	3
1988-89	29	21	20	95.2	14	70.0	10	2	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	6	50.0
$6.01 - $[illegible]	3	25.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	2	16.7
$12.01 - $14.00	1	8.3
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
SERVICE	9	75.0
SOCIAL SCIENCES & RELATED	1	8.3
TEACHING & RELATED	1	8.3
OTHER	1	8.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	36.4
1 MONTH	6	54.5
2-3 MONTHS	1	9.1
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	14	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

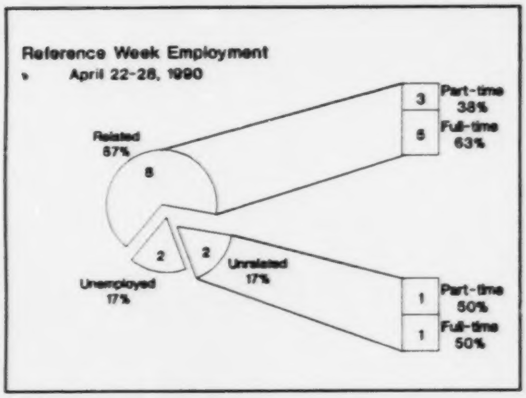
Food Administration

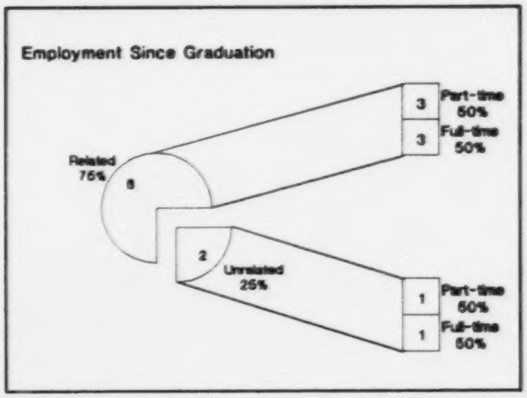
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	30	19	15	93.8	10	66.7	5	3	0	2
1987-88	22	21	18	94.7	0	0.0	0	0	0	0
1988-89	29	19	14	100	12	85.7	6	4	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	25.0
$10.01 - $12.00	6	75.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
SERVICE	4	66.7
MEDICINE & HEALTH	2	33.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	42.9
1 MONTH	3	42.9
2-3 MONTHS	1	14.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	11	91.7
OUT OF PROVINCE	1	8.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

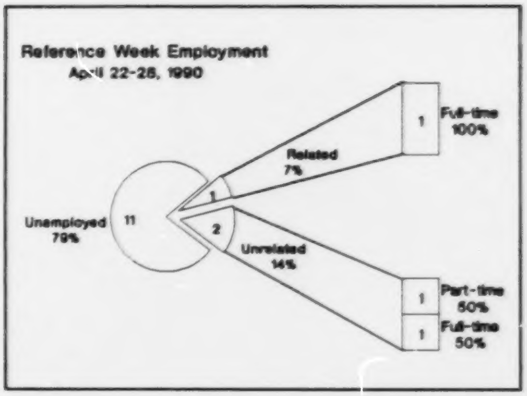
Forest Resources Technology

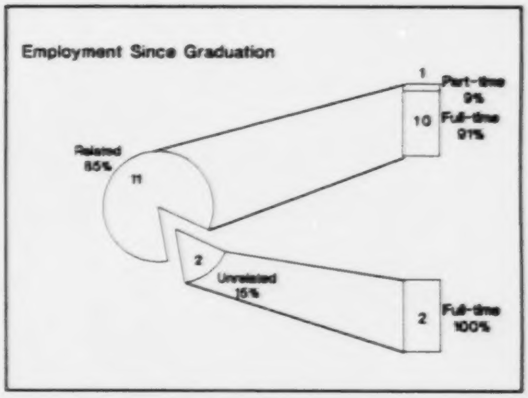
Program Duration: 2 Years **Award:** Diploma of Technology

Program Locations: Fisher Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	29	22	18	94.7	14	77.8	4	0	9	1
1988-89	23	23	17	85.0	15	88.2	2	1	11	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	9.1
$8.01 - $10.00	1	9.1
$10.01 - $12.00	1	9.1
$12.01 - $14.00	2	18.2
$14.01 - $16.00	2	18.2
$16.01 OR MORE	4	36.4
UNSPECIFIED	0	

OCCUPATIONS	#	%
FORESTRY & LOGGING	5	50.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	10.0
CLERICAL & RELATED	1	10.0
OTHER	3	30.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	30.8
1 MONTH	7	53.8
2-3 MONTHS	2	15.4
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	13	86.7
OUT OF PROVINCE	2	13.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

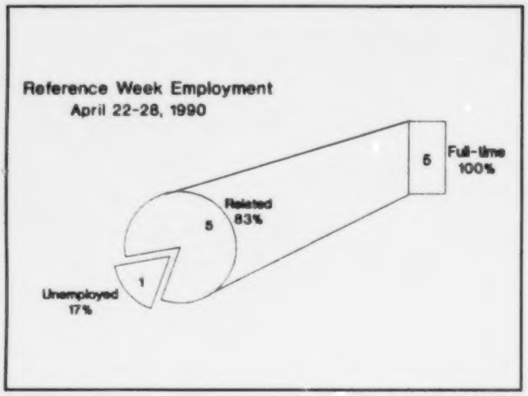
Hotel/Restaurant Management

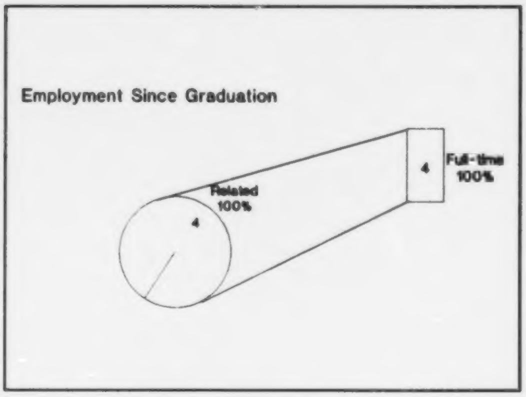
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	21	14	6	46.2	1	16.7	1	0	0	0
1987-88	22	13	5	50.0	3	60.0	3	0	0	0
1988-89	18	18	8	80.0	6	75.0	5	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	60.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	20.0
$10.01 - $12.00	1	20.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
SERVICE	4	66.7
MANAGERIAL, ADMINISTRATIVE & RELATED	1	16.7
SALES	1	16.7
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	1	33.3
2-3 MONTHS	2	66.7
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	2	33.3
OUT OF PROVINCE	4	66.7
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

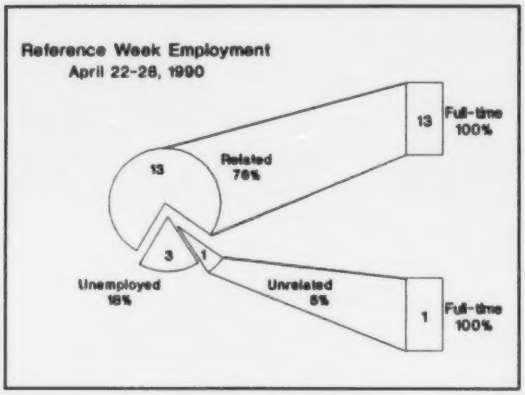
Information Processing

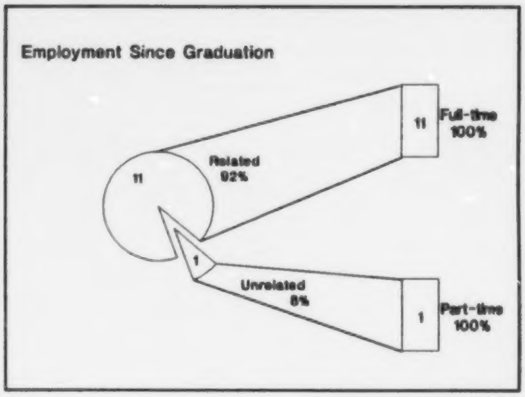
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Fisher Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	22	0	18	81.8	12	66.7	3	2	1	6
1987-88	30	11	8	88.9	3	37.5	2	0	0	1
1988-89	36	22	21	95.5	17	81.0	14	0	3	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	5	35.7
$8.01 - $10.00	6	42.9
$10.01 - $12.00	3	21.4
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	15	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	50.0
1 MONTH	3	25.0
2-3 MONTHS	2	16.7
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	8.3
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	15	88.2
OUT OF PROVINCE	2	11.8
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

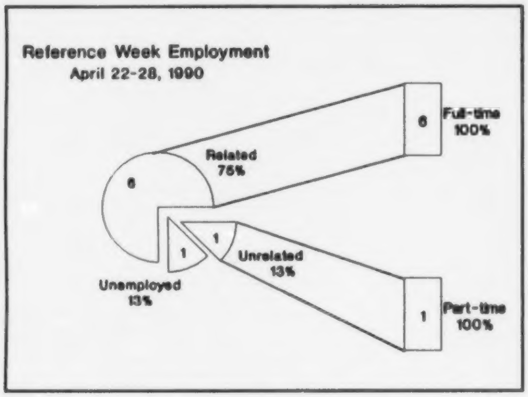
Journalism

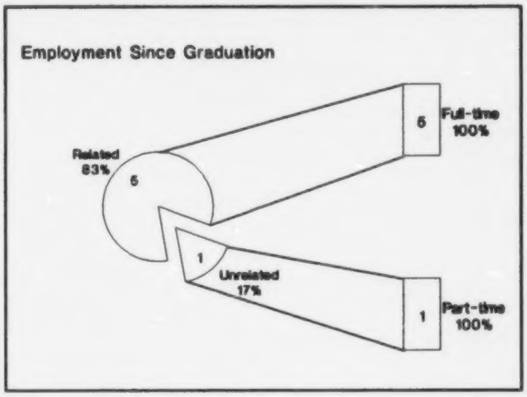
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	20	37	26	81.3	16	61.5	4	2	2	8
1988-89	20	14	12	85.7	8	66.7	6	1	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	50.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	2	33.3
$12.01 - $14.00	1	16.7
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
ARTISTIC, LITERARY, PERFORMING ARTS	3	42.9
CLERICAL & RELATED	2	28.6
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	2	28.6
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	33.3
1 MONTH	2	33.3
2-3 MONTHS	1	16.7
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	16.7
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	5	62.5
OUT OF PROVINCE	3	37.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

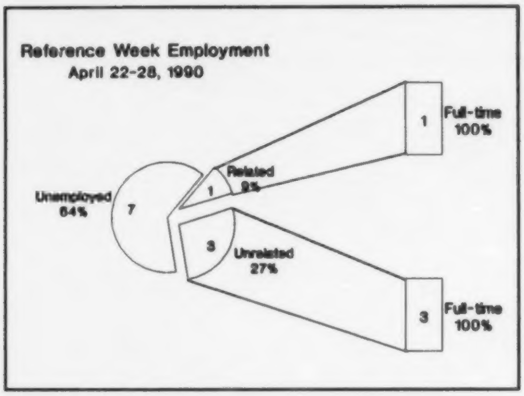
Mineral Technology

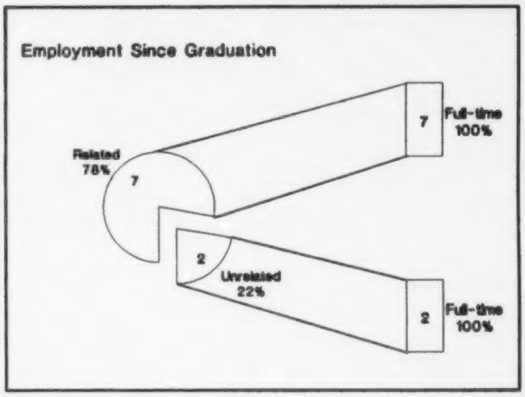
Program Duration: 2 Years **Award:** Diploma of Technology

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	21	17	6	75.0	3	50.0	0	0	2	1
1988-89	21	21	15	78.9	12	80.0	4	0	7	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	12.5
$8.01 - $10.00	3	37.5
$10.01 - $12.00	1	12.5
$12.01 - $14.00	2	25.0
$14.01 - $16.00	1	12.5
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	6	60.0
SERVICE	2	20.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	10.0
OTHER	1	10.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	7	77.8
1 MONTH	0	0.0
2-3 MONTHS	1	11.1
4-6 MONTHS	1	11.1
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	9	75.0
OUT OF PROVINCE	3	25.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

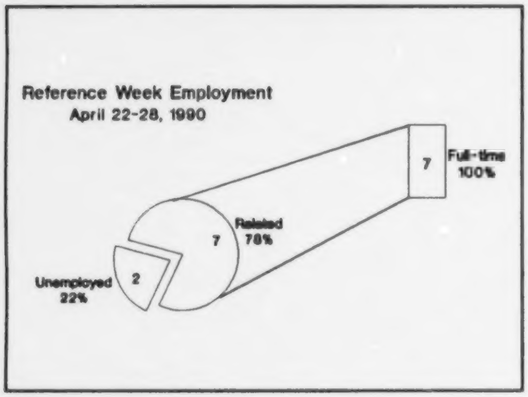
Secretarial Science

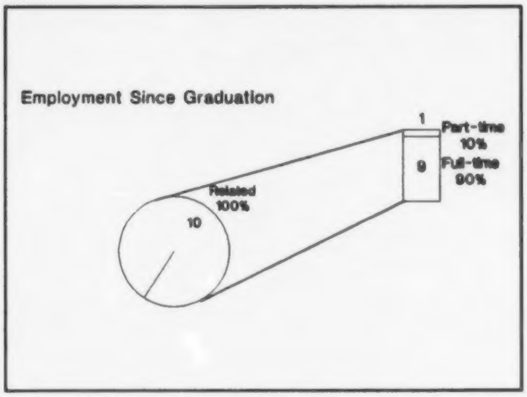
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Fisher Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	43	30	24	88.9	13	54.2	11	1	1	0
1988-89	36	18	14	77.8	10	71.4	7	0	2	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	10.0
$6.01 - $8.00	2	20.0
$8.01 - $10.00	4	40.0
$10.01 - $12.00	1	10.0
$12.01 - $14.00	1	10.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	1	10.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	9	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	20.0
1 MONTH	2	20.0
2-3 MONTHS	4	40.0
4-6 MONTHS	2	20.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	9	90.0
OUT OF PROVINCE	1	10.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

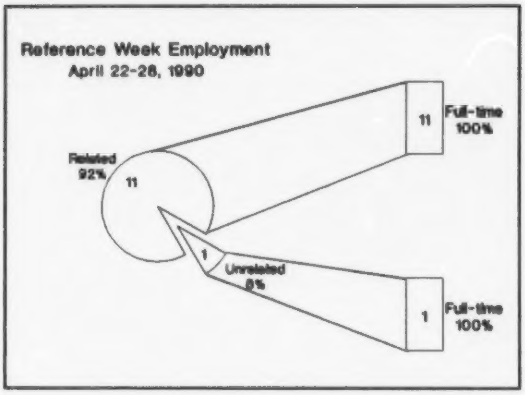
Secretarial Science (Administration)

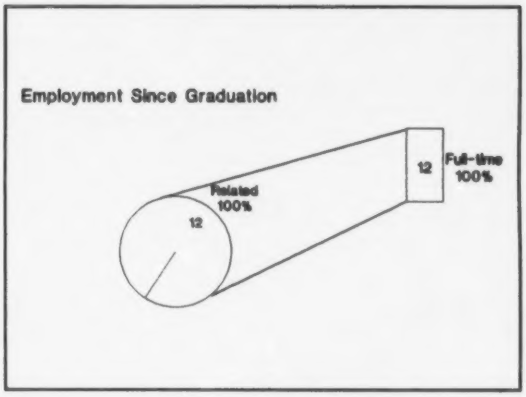
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	4	37	11	84.6	6	54.5	4	0	1	1
1987-88	24	19	8	72.7	5	62.5	4	0	1	0
1988-89	20	17	14	100	12	85.7	12	0	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	9.1
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	18.2
$10.01 - $12.00	8	72.7
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	12	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	25.0
1 MONTH	8	66.7
2-3 MONTHS	1	8.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	12	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

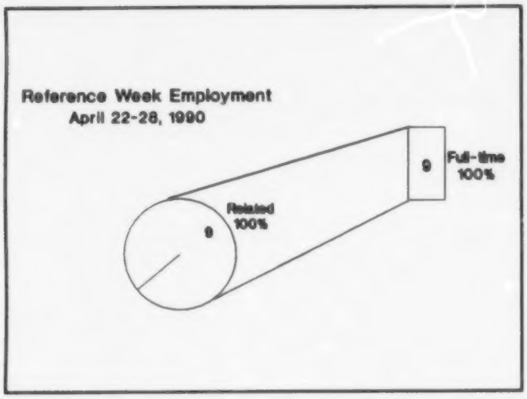
Secretarial Science (Legal)

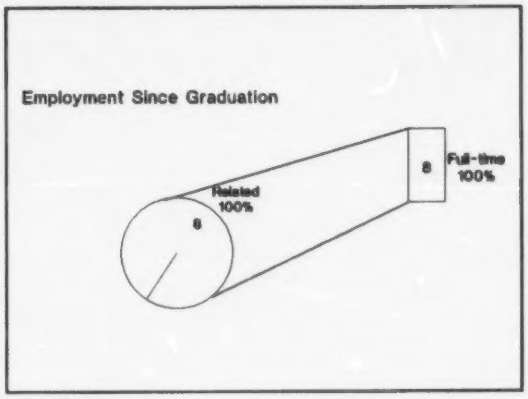
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	7	36	3	75.0	2	66.7	2	0	0	0
1987-88	23	18	7	100	6	85.7	6	0	0	0
1988-89	22	19	10	90.9	9	90.0	9	0	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	5	55.6
$10.01 - $12.00	4	44.4
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	9	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	75.0
1 MONTH	2	25.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	9	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

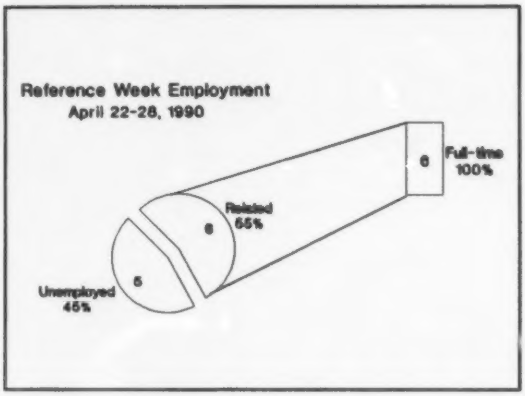
Small Business Entrepreneurship

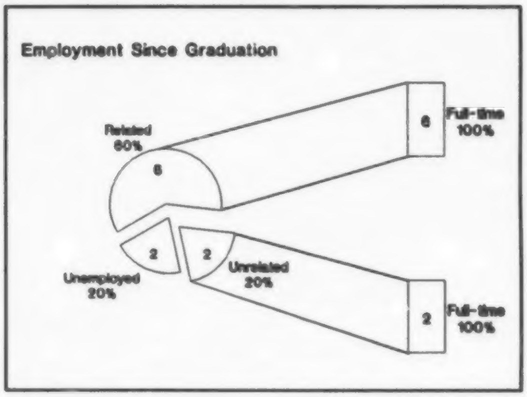
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	17	13	5	62.5	3	60.0	2	0	0	1
1988-89	23	15	12	85.7	12	100	6	0	5	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	20.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	3	60.0
$12.01 - $14.00	1	20.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	3	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	6	66.7
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	11.1
SALES	1	11.1
OTHER	1	11.1
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	14.3
1 MONTH	1	14.3
2-3 MONTHS	4	57.1
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	14.3
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	11	91.7
OUT OF PROVINCE	1	8.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

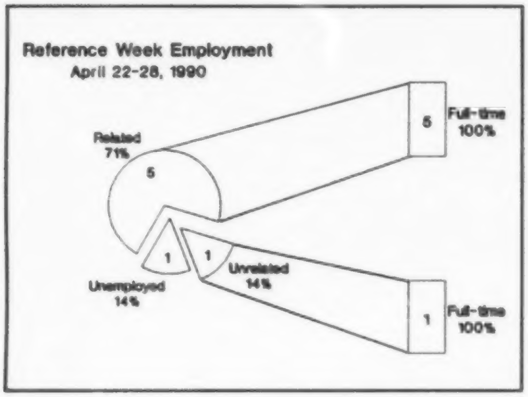
Travel Counsellor

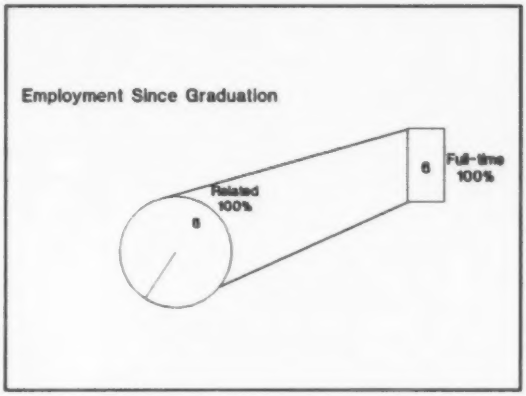
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	20	16	14	87.5	8	57.1	3	2	3	0
1987-88	19	18	15	83.3	7	46.7	3	2	1	1
1988-89	26	16	14	93.3	7	50.0	6	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	16.7
$6.01 - $8.00	2	33.3
$8.01 - $10.00	2	33.3
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	16.7
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	5	71.4
SERVICE	2	28.6
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	16.7
1 MONTH	2	33.3
2-3 MONTHS	1	16.7
4-6 MONTHS	1	16.7
MORE THAN 6 MONTHS	1	16.7
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	4	57.1
OUT OF PROVINCE	3	42.9
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).

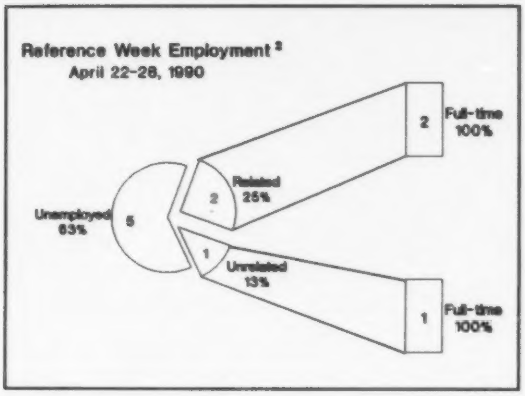
Visual Arts

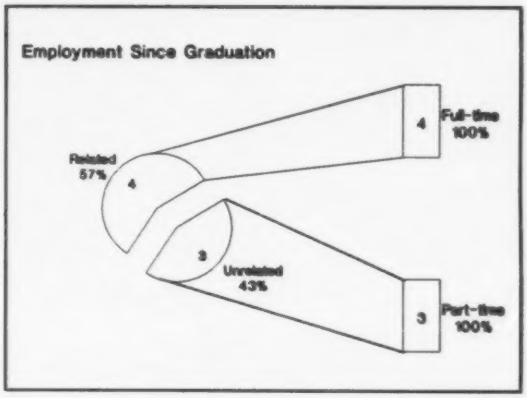
Program Duration: 2 Years **Award:** Diploma of Applied Arts

Program Locations: Western Community College (Stephenville)

ACADEMIC YEAR	ENROLMENTS		GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	30	14	8	57.1	3	37.5	1	0	0	2
1987-88	26	11	7	87.5	2	28.6	1	0	0	1
1988-89	26	16	14	87.5	11	78.6	3	1	5	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment [2]
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	1	33.3
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	33.3
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	33.3
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	1	20.0
SERVICE	1	20.0
FARMING, HORTICULTURAL & ANIMAL-HUSBANDRY	1	20.0
OTHER	2	40.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	16.7
1 MONTH	1	16.7
2-3 MONTHS	3	50.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	16.7
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	8	72.7
OUT OF PROVINCE	3	27.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

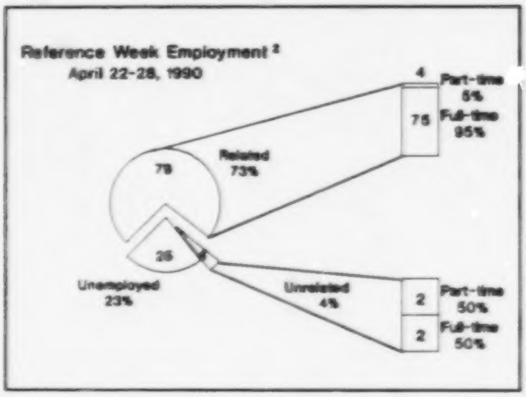
1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 2 enrolment (E) minus year 2 continuing students (C), i.e. GR = G / (E - C).
2. 1 worked part-time in reference week but did not specify relationship between job and training.

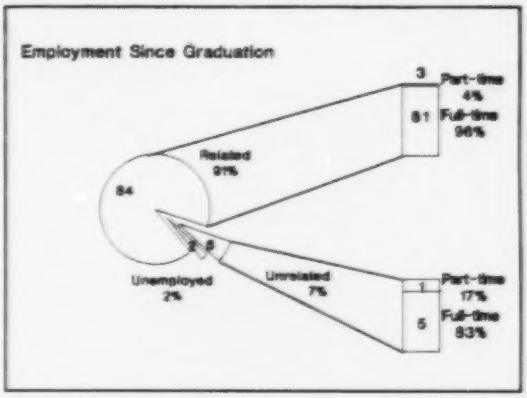
THREE YEAR COLLEGE PROGRAMS

All Three Year Programs

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	86	166	142	79	82.3	40	50.6	29	3	2	6
1987-88	264	229	167	132	86.3	78	59.1	51	3	14	10
1988-89	400	238	261	167	83.9	115	68.9	78	6	25	6

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	3.2
$6.01 - $8.00	4	4.3
$8.01 - $10.00	4	4.3
$10.01 - $12.00	24	25.5
$12.01 - $14.00	34	36.2
$14.01 - $16.00	12	12.8
$16.01 OR MORE	13	13.8
UNSPECIFIED	6	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	38	38.4
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	17	17.2
MEDICINE & HEALTH	14	14.1
OTHER	30	30.3
UNSPECIFIED	6	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	45	51.1
1 MONTH	25	28.4
2-3 MONTHS	7	8.0
4-6 MONTHS	8	9.1
MORE THAN 6 MONTHS	3	3.4
UNSPECIFIED	5	

RESIDENCE	#	%
NEWFOUNDLAND	85	74.6
OUT OF PROVINCE	29	25.4
UNSPECIFIED	1	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

2. 1 worked full-time in reference week but did not specify relationship between job and training.

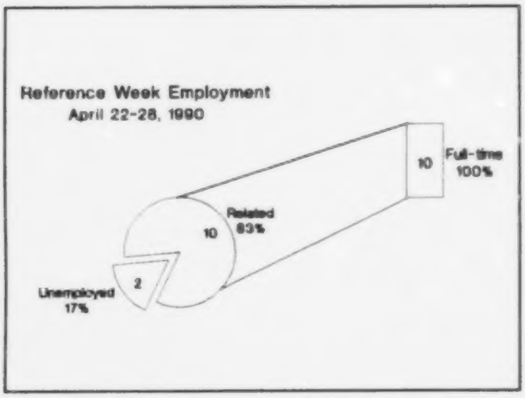
Civil Engineering Technology

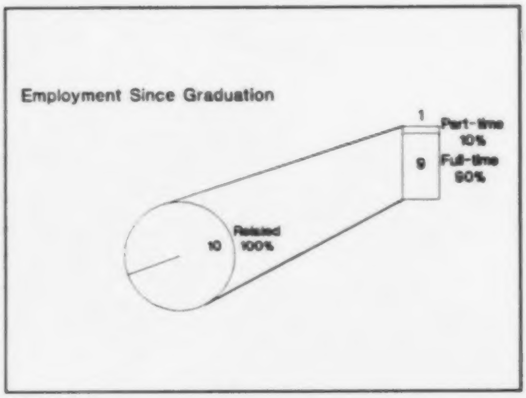
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1[1]	YEAR 2	YEAR 3	#	%[2]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1987-88	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	87	30	16	15	100	12	80.0	10	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	18.2
$10.01 - $12.00	3	27.3
$12.01 - $14.00	4	36.4
$14.01 - $16.00	2	18.2
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	9	81.8
MANAGERIAL, ADMINISTRATIVE & RELATED	2	18.2
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	5	50.0
1 MONTH	4	40.0
2-3 MONTHS	0	0.0
4-6 MONTHS	1	10.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	9	75.0
OUT OF PROVINCE	3	25.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] A common first year for this program and Architectural Engineering Technology was offered at Fisher Institute of Applied Arts and Technology, Avalon Community College (Carbonear), Eastern Community College (Clarenville) and Central Newfoundland Community College (Grand Falls) totalling 58 students in 1988-89.

[2] Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

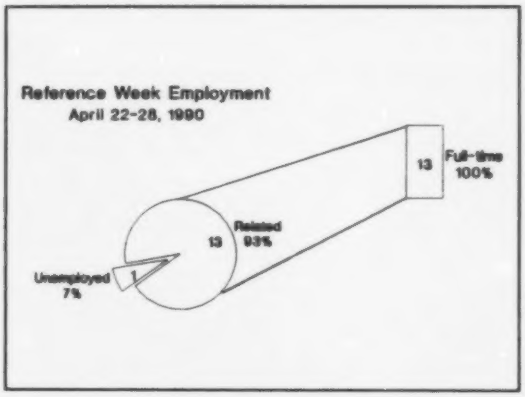
Electronics Engineering Technology

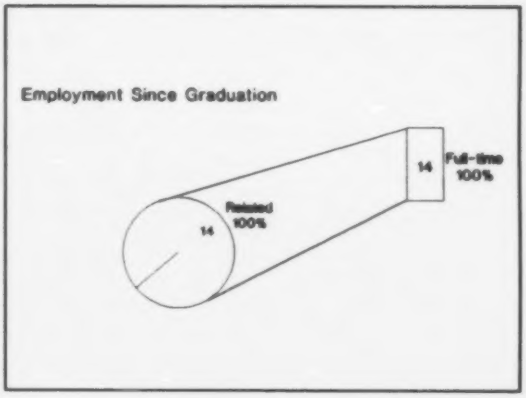
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology, Fisher Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1[1]	YEAR 2	YEAR 3	#	%[2]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	111	25	19	14	73.7	6	42.9	6	0	0	0
1987-88	206	89	34	30	90.9	24	80.0	15	1	3	5
1988-89	196	52	43	35	92.1	17	48.6	13	0	1	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	7.1
$6.01 - $8.00	3	21.4
$8.01 - $10.00	1	7.1
$10.01 - $12.00	2	14.3
$12.01 - $14.00	3	21.4
$14.01 - $16.00	4	28.6
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	7	43.8
CONSTRUCTION TRADES	4	25.0
SALES	2	12.5
OTHER	3	18.8
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	42.9
1 MONTH	4	28.6
2-3 MONTHS	1	7.1
4-6 MONTHS	3	21.4
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	13	76.5
OUT OF PROVINCE	4	23.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. A common first year for this program and Electrical Engineering Technology was offered at Central Newfoundland Community College (Gander), Newfoundland and Labrador Institute of Fisheries and Marine Technology and Labrador Community College (Happy Valley) totalling 111, 113 and 154 students in 1986-87, 1987-88 and 1988-89, respectively.
2. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

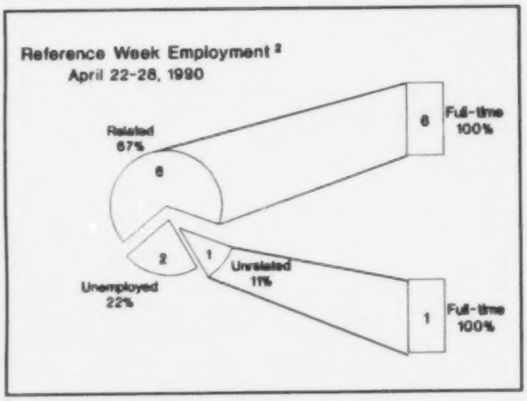
Food Technology (Marine Products)

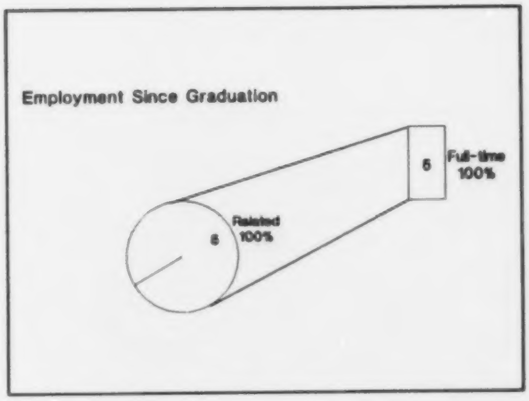
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	25	15	22	15	68.2	7	46.7	6	0	1	0
1988-89	32	18	20	14	70.0	10	71.4	8	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	14.3
$6.01 - $8.00	1	14.3
$8.01 - $10.00	0	0.0
$10.01 - $12.00	4	57.1
$12.01 - $14.00	1	14.3
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	4	44.4
PROCESSING	3	33.3
MANAGERIAL, ADMINISTRATIVE & RELATED	1	11.1
OTHER	1	11.1
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	66.7
1 MONTH	1	16.7
2-3 MONTHS	1	16.7
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	8	80.0
OUT OF PROVINCE	2	20.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).
2. 1 worked full-time in reference week but did not specify relationship between job and training.

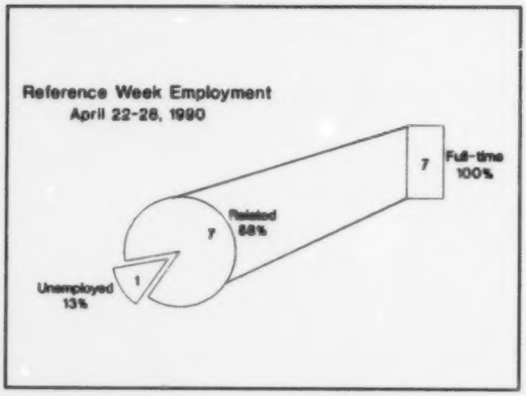
Marine Systems Design Technology

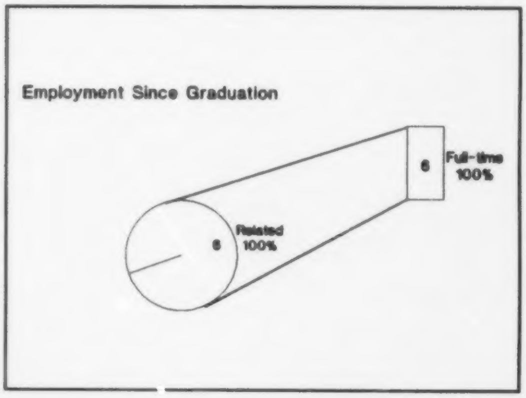
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	21	11	9	9	100	5	55.6	5	0	0	0
1988-89	21	12	10	10	100	8	80.0	7	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	6	75.0
$14.01 - $16.00	1	12.5
$16.01 OR MORE	1	12.5
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	5	62.5
SOCIAL SCIENCES & RELATED	1	12.5
SALES	1	12.5
OTHER	1	12.5
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	33.3
1 MONTH	2	33.3
2-3 MONTHS	0	0.0
4-6 MONTHS	1	16.7
MORE THAN 6 MONTHS	1	16.7
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	3	42.9
OUT OF PROVINCE	4	57.1
UNSPECIFIED	1	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

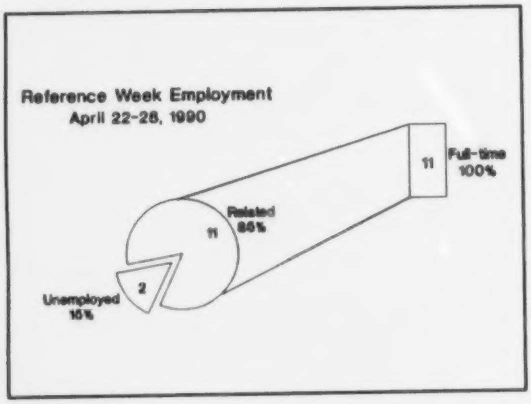
Medical Laboratory Sciences

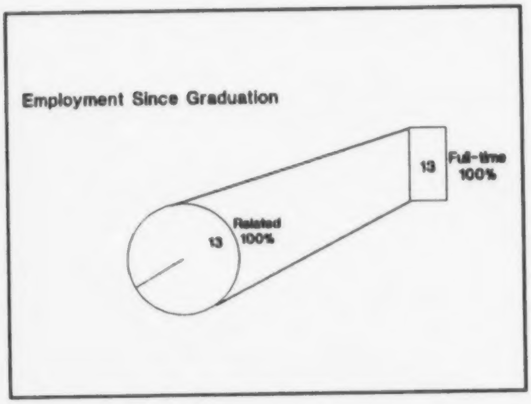
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	31	30	43	26	100	13	52.0	7	1	1	4
1987-88	0	0	0	0	N/A	0	N/A	0	0	0	0
1988-89	43	6	39	17	100	14	82.4	11	0	2	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	7.7
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	3	23.1
$12.01 - $14.00	9	69.2
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
MEDICINE & HEALTH	9	69.2
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	3	23.1
TEACHING & RELATED	1	7.7
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	10	83.3
1 MONTH	2	16.7
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	13	92.9
OUT OF PROVINCE	1	7.1
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

[1] Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

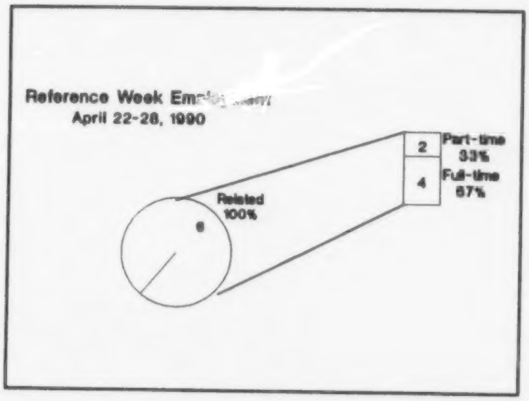
Medical Radiography

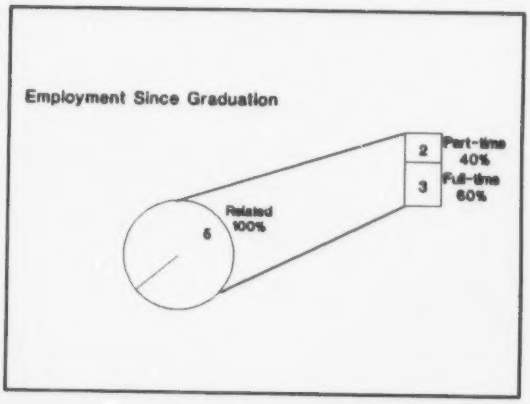
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1987-88	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	33	0	16	8	88.9	6	75.0	4	2	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	16.7
$14.01 - $16.00	1	16.7
$16.01 OR MORE	4	66.7
UNSPECIFIED	0	

OCCUPATIONS	#	%
MEDICINE & HEALTH	4	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	0	0.0
1 MONTH	0	0.0
2-3 MONTHS	3	60.0
4-6 MONTHS	2	40.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	1	16.7
OUT OF PROVINCE	5	83.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

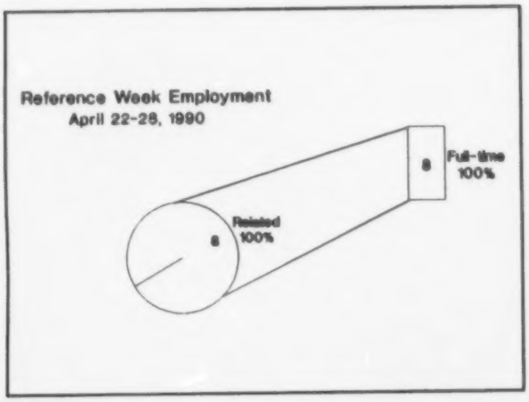
Naval Architecture Technology

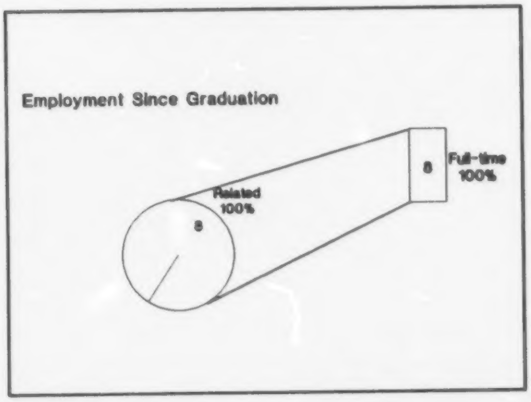
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Newfoundland and Labrador Institute of Fisheries and Marine Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	0	0	0	0	N/A	0	N/A	0	0	0	0
1987-88	28	16	17	17	100	4	23.5	4	0	0	0
1988-89	50	18	15	15	100	8	53.3	8	0	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	2	25.0
$12.01 - $14.00	4	50.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	2	25.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	4	50.0
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	2	25.0
SOCIAL SCIENCES & RELATED	1	12.5
OTHER	1	12.5
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	37.5
1 MONTH	0	0.0
2-3 MONTHS	2	25.0
4-6 MONTHS	1	12.5
MORE THAN 6 MONTHS	2	25.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	1	12.5
OUT OF PROVINCE	7	87.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

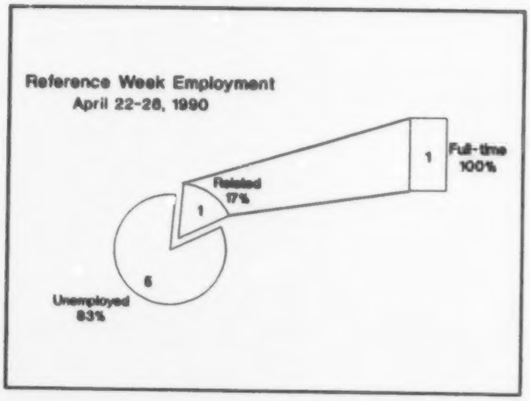
Petroleum Engineering Technology

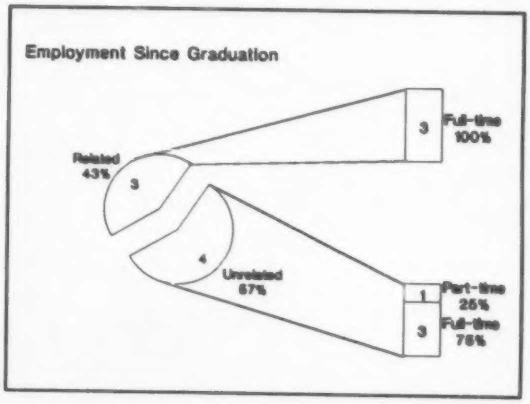
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	25	21	26	11	84.6	7	63.6	5	1	1	0
1987-88	23	16	13	8	88.9	7	87.5	4	0	2	1
1988-89	33	8	20	9	60.0	8	88.9	1	0	5	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	3	100
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
PRODUCT FABRICATING, ASSEMBLING, REPAIRING	5	83.3
CLERICAL & RELATED	1	16.7
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	28.6
1 MONTH	5	71.4
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	8	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

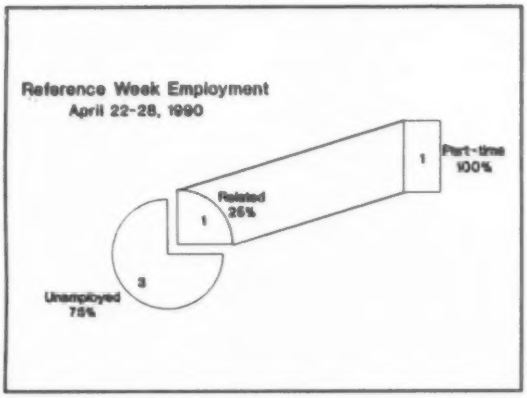
Surveying Engineering Technology

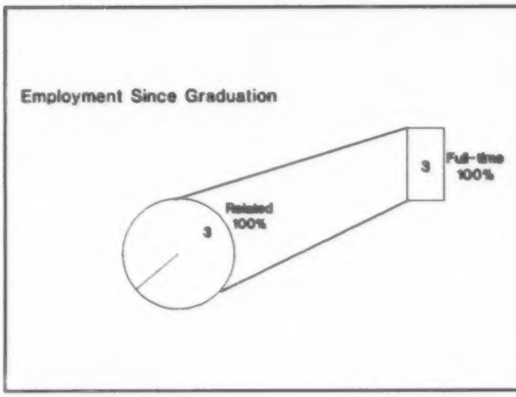
Program Duration: 3 Years **Award:** Diploma of Technology

Program Locations: Cabot Institute of Applied Arts and Technology

ACADEMIC YEAR	ENROLMENTS			GRADUATES		RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
	YEAR 1	YEAR 2	YEAR 3	#	%[1]	#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	23	18	36	14	66.7	8	57.1	7	0	0	1
1987-88	34	14	20	10	71.4	7	70.0	1	1	5	0
1988-89	66	17	15	8	100	4	50.0	0	1	3	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	25.0
$10.01 - $12.00	2	50.0
$12.01 - $14.00	1	25.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	3	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	100
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	4	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

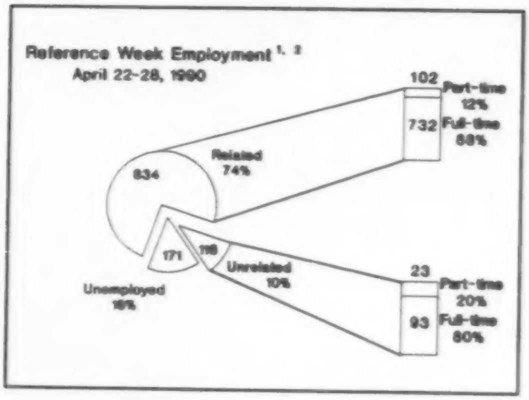
1. Graduation rate (GR) is calculated as the number of graduates (G) divided by year 3 enrolment (E) minus year 3 continuing students (C), i.e. GR = G / (E - C).

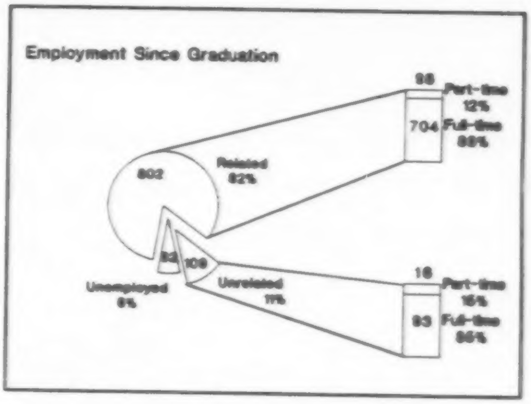
MEMORIAL UNIVERSITY DEGREE PROGRAMS

All Memorial University Undergraduate Degrees

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	1848	94.1	1002	54.2	421	374	82	125
1987-88	1428	95.5	751	52.6	455	112	86	98
1988-89	1671	100	1229	73.5	828	126	171	104

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment [1, 2]
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	26	3.0
$6.01 - $8.00	30	3.4
$8.01 - $10.00	61	6.8
$10.01 - $12.00	103	11.7
$12.01 - $14.00	183	20.9
$14.01 - $16.00	140	16.0
$16.01 OR MORE	344	39.2
UNSPECIFIED	86	

OCCUPATIONS	#	%
TEACHING & RELATED	368	37.9
MANAGERIAL, ADMINISTRATIVE & RELATED	126	13.2
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	112	11.9
OTHER	360	37.0
UNSPECIFIED	21	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	440	50.5
1 MONTH	153	17.5
2-3 MONTHS	136	16.5
4-6 MONTHS	92	10.6
MORE THAN 6 MONTHS	52	6.0
UNSPECIFIED	63	

RESIDENCE	#	%
NEWFOUNDLAND	1032	84.1
OUT OF PROVINCE	195	15.9
UNSPECIFIED	2	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1 . 3 worked full-time in reference week but did not specify relationship between job and training.

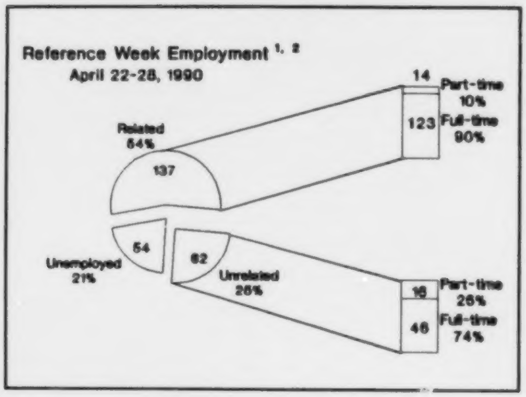
2 . 1 worked part-time in reference week but did not specify relationship between job and training.

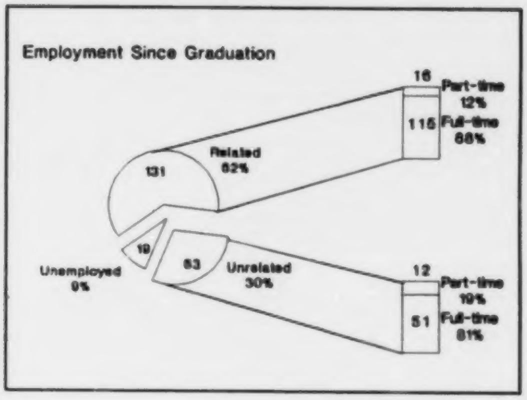
FACULTY OF ARTS

All Arts Programs

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	331	16.9	157	47.4	64	56	9	28
1987-88	350	23.4	182	52.0	105	22	18	37
1988-89	407	24.4	293	72.0	170	31	54	38

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	9	6.0
$6.01 - $8.00	11	7.4
$8.01 - $10.00	6	4.0
$10.01 - $12.00	31	20.8
$12.01 - $14.00	21	14.1
$14.01 - $16.00	17	11.4
$16.01 OR MORE	54	36.2
UNSPECIFIED	16	

OCCUPATIONS	#	%
TEACHING & RELATED	66	31.6
SOCIAL SCIENCES & RELATED	32	15.3
CLERICAL & RELATED	29	13.9
OTHER	82	39.2
UNSPECIFIED	6	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	97	53.0
1 MONTH	31	16.9
2-3 MONTHS	24	13.1
4-6 MONTHS	19	10.4
MORE THAN 6 MONTHS	12	6.6
UNSPECIFIED	19	

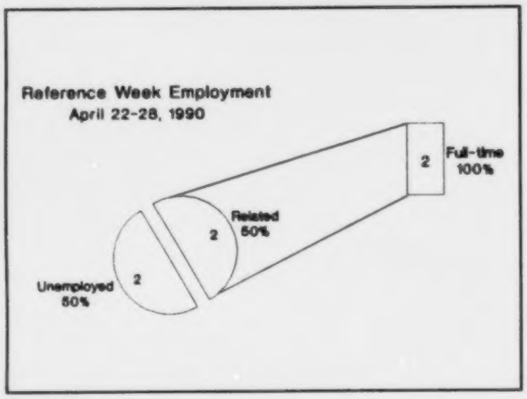
RESIDENCE	#	%
NEWFOUNDLAND	258	88.1
OUT OF PROVINCE	35	11.9
UNSPECIFIED	0	

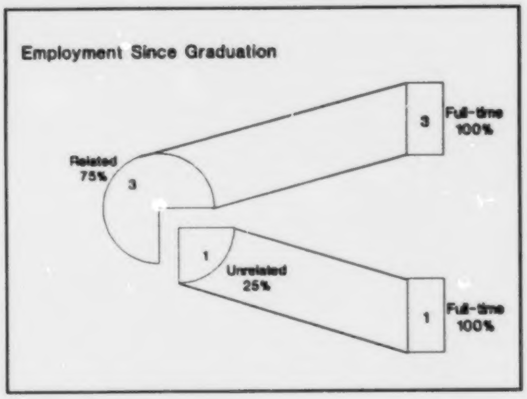
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. 1 worked full-time in reference week but did not specify relationship between job and training.
2. 1 worked part-time in reference week but did not specify relationship between job and training.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	5	0.3	3	60.0	3	0	0	0
1987-88	4	0.3	3	75.0	2	0	0	1
1988-89	8	0.5	4	50.0	2	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	33.3
$14.01 - $16.00	1	33.3
$16.01 OR MORE	1	33.3
UNSPECIFIED	0	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	1	25.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	25.0
SOCIAL SCIENCES & RELATED	1	25.0
OTHER	1	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	75.0
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	25.0
UNSPECIFIED	0	

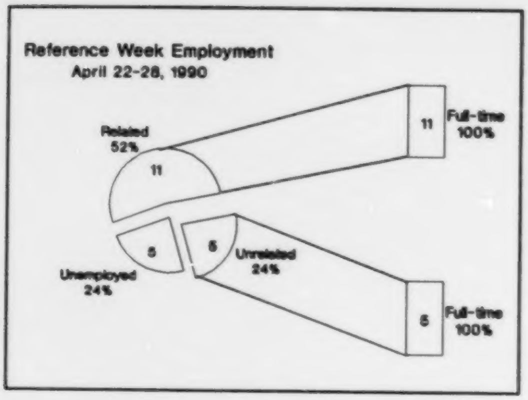
RESIDENCE	#	%
NEWFOUNDLAND	4	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

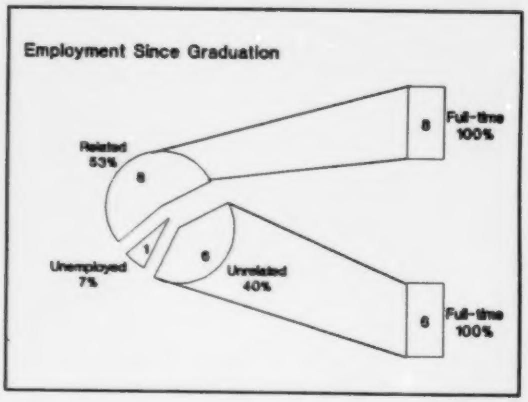
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Archaeology and Social/Cultural options were consolidated with the Anthropology major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	19	1.0	9	47.4	7	1	0	1
1987-88	39	2.6	15	38.5	11	0	3	1
1988-89	35	2.1	21	60.0	16	0	5	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	5	45.5
$12.01 - $14.00	3	27.3
$14.01 - $16.00	2	18.2
$16.01 OR MORE	1	9.1
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	7	36.8
MANAGERIAL, ADMINISTRATIVE & RELATED	5	26.3
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	2	10.5
OTHER	5	26.3
UNSPECIFIED	0	

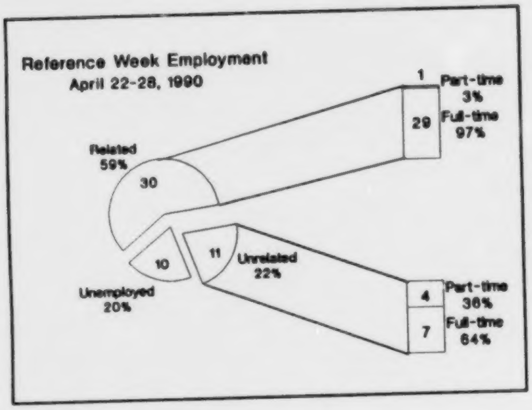
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	5	35.7
1 MONTH	0	0.0
2-3 MONTHS	3	21.4
4-6 MONTHS	4	28.6
MORE THAN 6 MONTHS	2	14.3
UNSPECIFIED	0	

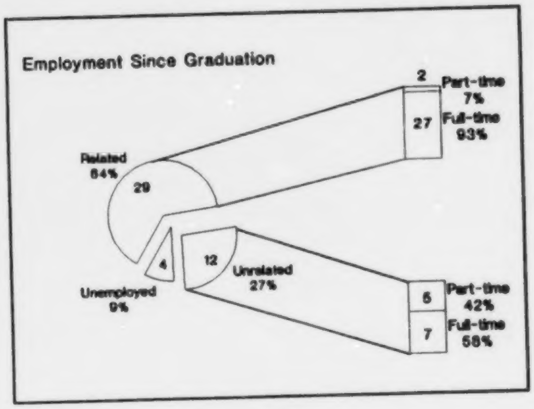
RESIDENCE	#	%
NEWFOUNDLAND	18	85.7
OUT OF PROVINCE	3	14.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 5 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	106	5.4	55	51.9	17	29	2	7
1987-88	90	6.0	44	48.9	28	3	1	12
1988-89	93	5.6	61	65.6	36	5	10	10

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	4	12.1
$6.01 - $8.00	2	6.1
$8.01 - $10.00	1	3.0
$10.01 - $12.00	1	3.0
$12.01 - $14.00	4	12.1
$14.01 - $16.00	3	9.1
$16.01 OR MORE	18	54.5
UNSPECIFIED	6	

OCCUPATIONS	#	%
TEACHING & RELATED	24	53.3
CLERICAL & RELATED	6	13.3
SOCIAL SCIENCES & RELATED	3	6.7
OTHER	12	26.7
UNSPECIFIED	1	

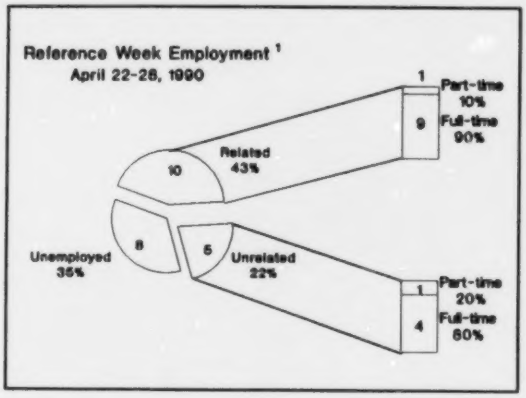
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	23	62.2
1 MONTH	4	10.8
2-3 MONTHS	4	10.8
4-6 MONTHS	4	10.8
MORE THAN 6 MONTHS	2	5.4
UNSPECIFIED	5	

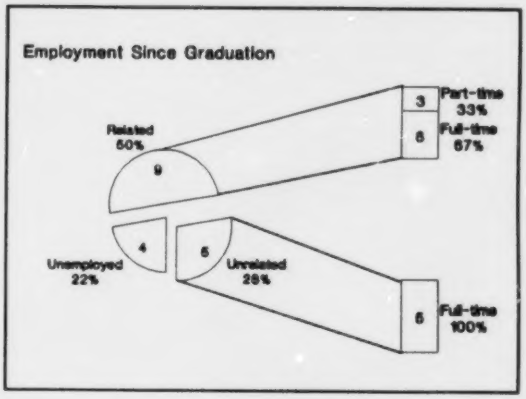
RESIDENCE	#	%
NEWFOUNDLAND	55	90.2
OUT OF PROVINCE	6	9.8
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	23	1.2	5	21.7	0	3	0	2
1987-88	36	2.4	25	69.4	11	5	3	6
1988-89	36	2.2	25	69.4	13	3	8	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	3	30.0
$12.01 - $14.00	3	30.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	4	40.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
TEACHING & RELATED	4	30.8
MANAGERIAL, ADMINISTRATIVE & RELATED	2	15.4
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	2	15.4
OTHER	5	38.5
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	50.0
1 MONTH	4	33.3
2-3 MONTHS	0	0.0
4-6 MONTHS	2	16.7
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	4	

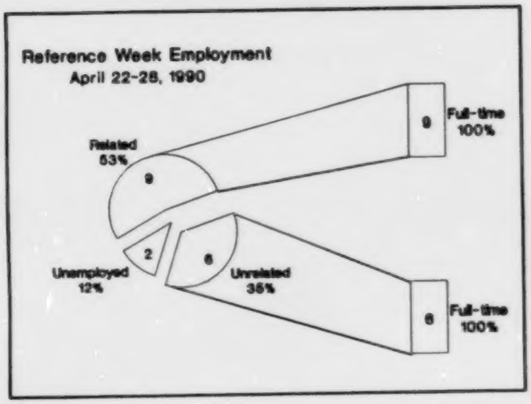
RESIDENCE	#	%
NEWFOUNDLAND	20	80.0
OUT OF PROVINCE	5	20.0
UNSPECIFIED	0	

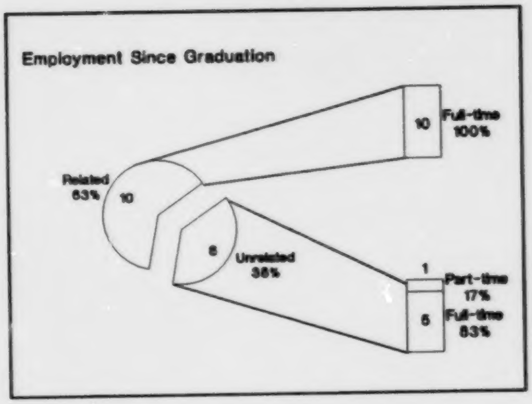
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1 . 1 worked part-time in reference week but did not specify relationship between job and training.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	23	1.2	11	47.8	2	6	2	1
1987-88	21	1.4	13	61.9	6	3	2	2
1988-89	21	1.3	18	85.7	15	0	2	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	12.5
$10.01 - $12.00	2	25.0
$12.01 - $14.00	1	12.5
$14.01 - $16.00	0	0.0
$16.01 OR MORE	4	50.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	6	35.3
SALES	3	17.6
MANAGERIAL, ADMINISTRATIVE & RELATED	2	11.8
OTHER	6	35.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	10	66.7
1 MONTH	1	6.7
2-3 MONTHS	1	6.7
4-6 MONTHS	2	13.3
MORE THAN 6 MONTHS	1	6.7
UNSPECIFIED	1	

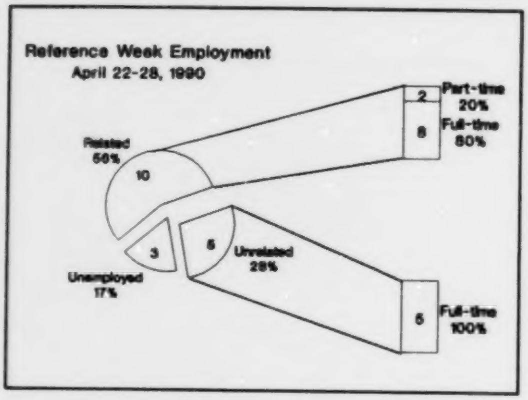
RESIDENCE	#	%
NEWFOUNDLAND	17	94.4
OUT OF PROVINCE	1	5.6
UNSPECIFIED	0	

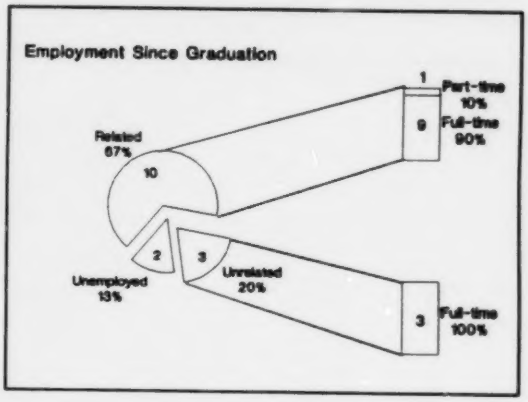
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Cultural/Historical, Cartography, Economic and Physical options were consolidated with the Geography major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	33	1.7	13	39.4	6	3	2	2
1987-88	29	1.9	10	34.5	6	1	2	1
1988-89	27	1.6	21	77.8	13	2	3	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	9.1
$6.01 - $8.00	1	9.1
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	9.1
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	9.1
$16.01 OR MORE	7	63.6
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	5	33.3
MANAGERIAL, ADMINISTRATIVE & RELATED	3	20.0
SOCIAL SCIENCES & RELATED	1	6.7
OTHER	6	40.0
UNSPECIFIED	1	

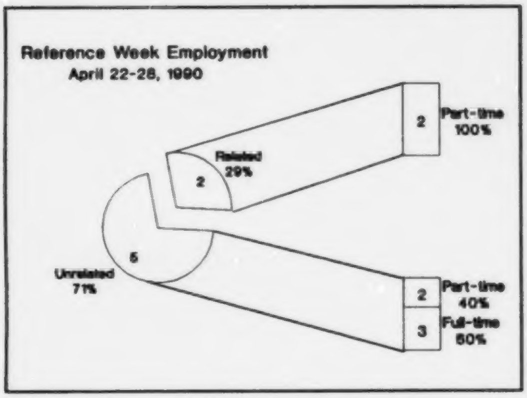
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	25.0
1 MONTH	3	25.0
2-3 MONTHS	3	25.0
4-6 MONTHS	2	16.7
MORE THAN 6 MONTHS	1	8.3
UNSPECIFIED	2	

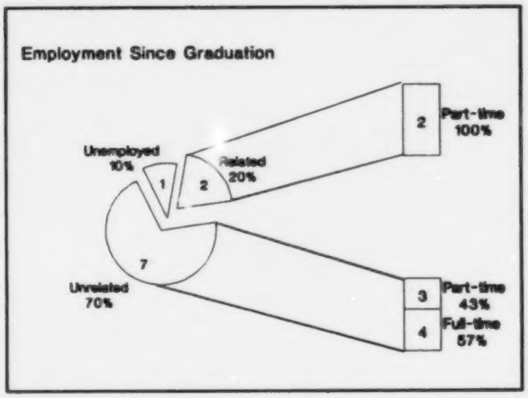
RESIDENCE	#	%
NEWFOUNDLAND	20	95.2
OUT OF PROVINCE	1	4.8
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	2	0.1	2	100	2	0	0	0
1987-88	8	0.5	5	62.5	3	1	1	0
1988-89	14	0.8	12	85.7	3	4	0	5

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	33.3
$8.01 - $10.00	1	33.3
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	1	33.3
UNSPECIFIED	0	

OCCUPATIONS	#	%
CLERICAL & RELATED	2	66.7
MANAGERIAL, ADMINISTRATIVE & RELATED	1	33.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	25.0
1 MONTH	3	37.5
2-3 MONTHS	1	12.5
4-6 MONTHS	2	25.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

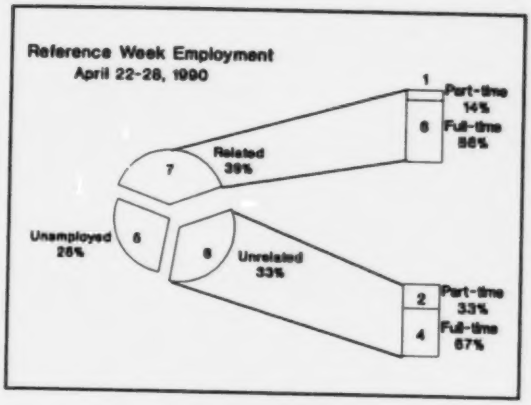
RESIDENCE	#	%
NEWFOUNDLAND	8	66.7
OUT OF PROVINCE	4	33.3
UNSPECIFIED	0	

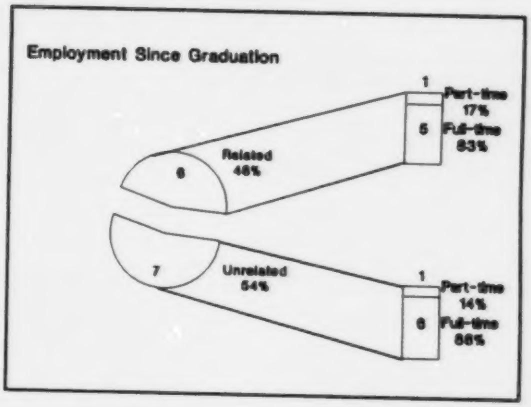
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Political Science

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	31	1.6	14	45.2	6	1	0	7
1987-88	36	2.4	18	50.0	10	2	1	5
1988-89	31	1.9	20	64.5	10	3	5	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	2	25.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	4	50.0
$12.01 - $14.00	2	25.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	4	25.0
CLERICAL & RELATED	3	18.8
SERVICE	2	12.5
OTHER	7	43.8
UNSPECIFIED	0	

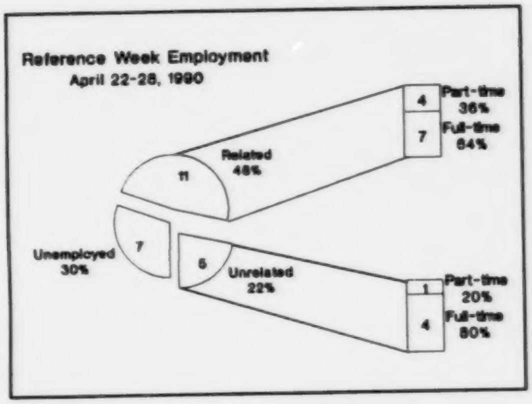
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	46.2
1 MONTH	1	7.7
2-3 MONTHS	3	23.1
4-6 MONTHS	2	15.4
MORE THAN 6 MONTHS	1	7.7
UNSPECIFIED	1	

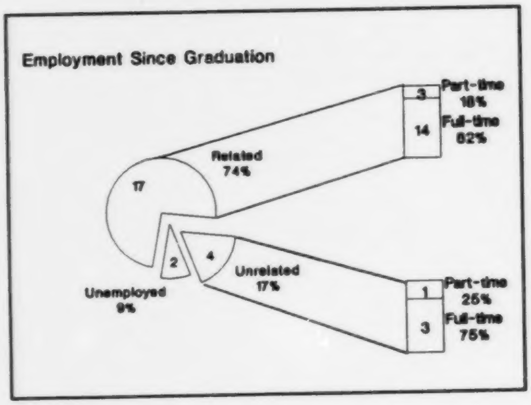
RESIDENCE	#	%
NEWFOUNDLAND	16	80.0
OUT OF PROVINCE	4	20.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	21	1.1	14	66.7	10	1	1	2
1987-88	12	0.8	9	75.0	5	1	0	3
1988-89	37	2.2	30	81.1	11	5	7	7

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	16.7
$6.01 - $8.00	3	16.7
$8.01 - $10.00	3	16.7
$10.01 - $12.00	3	16.7
$12.01 - $14.00	3	16.7
$14.01 - $16.00	2	11.1
$16.01 OR MORE	1	5.6
UNSPECIFIED	1	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	9	50.0
TEACHING & RELATED	4	22.2
CLERICAL & RELATED	2	11.1
OTHER	3	16.7
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	28.6
1 MONTH	9	42.9
2-3 MONTHS	3	14.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	3	14.3
UNSPECIFIED	1	

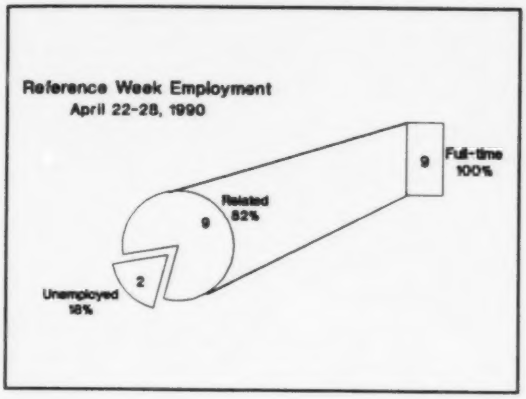
RESIDENCE	#	%
NEWFOUNDLAND	23	76.7
OUT OF PROVINCE	7	23.3
UNSPECIFIED	0	

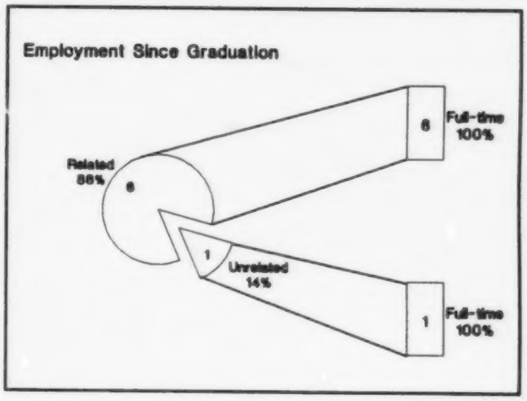
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Religious Studies[1]

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	16	0.8	7	43.8	2	3	1	1
1987-88	20	1.3	10	50.0	4	3	2	1
1988-89	16	1.0	11	68.8	9	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	12.5
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	12.5
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	12.5
$16.01 OR MORE	5	62.5
UNSPECIFIED	2	

OCCUPATIONS	#	%
TEACHING & RELATED	8	80.0
RELIGION	1	10.0
CONSTRUCTION TRADES	1	10.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	100
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

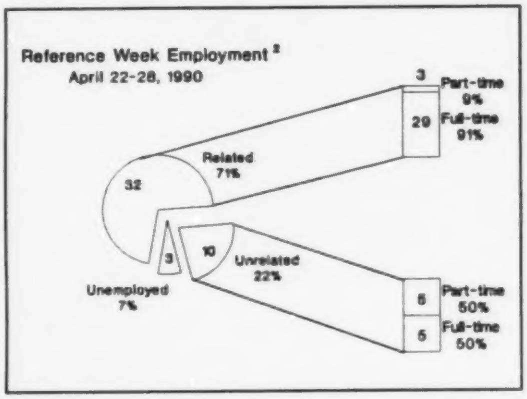
RESIDENCE	#	%
NEWFOUNDLAND	11	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

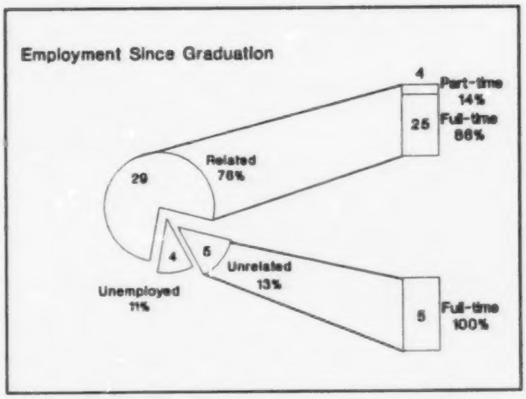
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Biblical Studies, Christian Theology and World Religions options were consolidated with the Religious Studies major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	41	2.1	20	48.8	7	8	0	5
1987-88	42	2.8	26	61.9	18	2	1	5
1988-89	66	3.9	53	80.3	35	8	3	7

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	3.2
$6.01 - $8.00	1	3.2
$8.01 - $10.00	0	0.0
$10.01 - $12.00	10	32.3
$12.01 - $14.00	2	6.5
$14.01 - $16.00	5	16.1
$16.01 OR MORE	12	38.7
UNSPECIFIED	2	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	14	36.8
TEACHING & RELATED	11	28.9
CLERICAL & RELATED	6	15.8
OTHER	7	18.4
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	22	64.7
1 MONTH	5	14.7
2-3 MONTHS	5	14.7
4-6 MONTHS	1	2.9
MORE THAN 6 MONTHS	1	2.9
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	51	96.2
OUT OF PROVINCE	2	3.8
UNSPECIFIED	0	

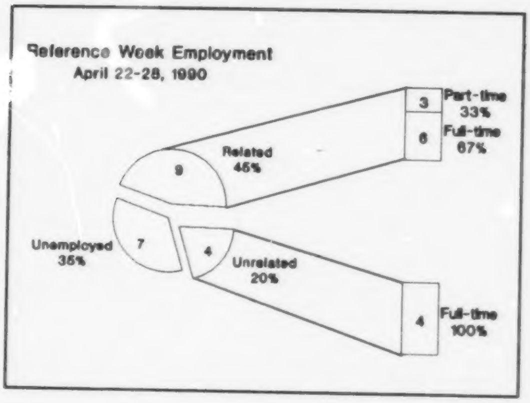
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

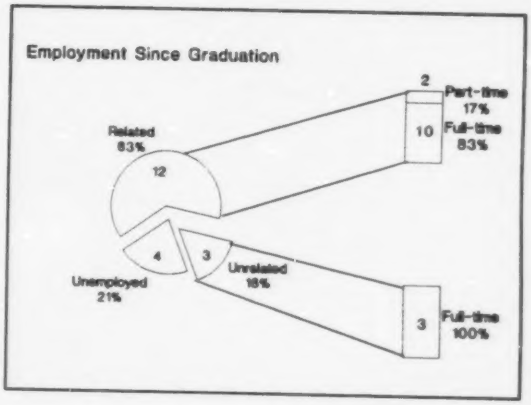
1. To enable reporting, the Sociology and Anthropology option was consolidated with the Sociology major.
2. 1 worked full-time in reference week but did not specify relationship between job and training.

All Arts (Honours) Programs

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	21	1.1	12	57.1	7	2	0	3
1987-88	14	0.9	7	50.0	4	1	1	1
1988-89	32	1.9	25	78.1	10	3	7	5

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	3	25.0
$10.01 - $12.00	3	25.0
$12.01 - $14.00	3	25.0
$14.01 - $16.00	2	16.7
$16.01 OR MORE	1	8.3
UNSPECIFIED	1	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	3	25.0
TEACHING & RELATED	2	16.7
ARTISTIC, LITERARY, PERFORMING ARTS	2	16.7
OTHER	5	41.7
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	7	53.8
1 MONTH	1	7.7
2-3 MONTHS	1	7.7
4-6 MONTHS	3	23.1
MORE THAN 6 MONTHS	1	7.7
UNSPECIFIED	3	

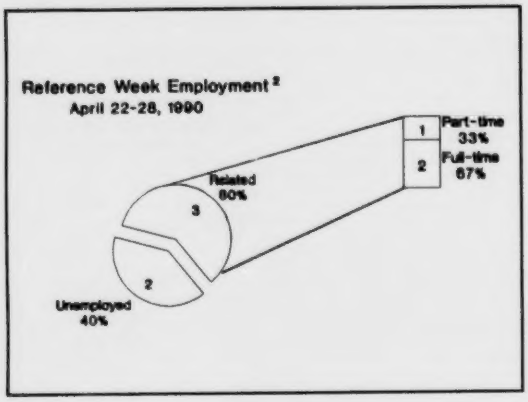
RESIDENCE	#	%
NEWFOUNDLAND	17	68.0
OUT OF PROVINCE	8	32.0
UNSPECIFIED	0	

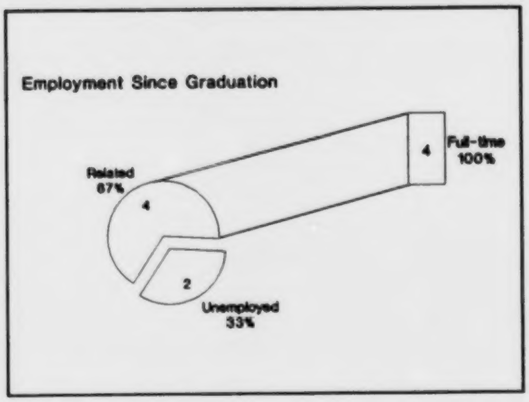
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

English

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	9	0.5	5	55.6	4	0	0	1
1987-88	3	0.2	2	66.7	0	0	1	1
1988-89	9	0.5	9	100	2	1	2	4

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	50.0
$10.01 - $12.00	1	25.0
$12.01 - $14.00	1	25.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
ARTISTIC, LITERARY, PERFORMING ARTS	2	66.7
SERVICE	1	33.3
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	100
1 MONTH	0	0.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

RESIDENCE	#	%
NEWFOUNDLAND	7	77.8
OUT OF PROVINCE	2	22.2
UNSPECIFIED	0	

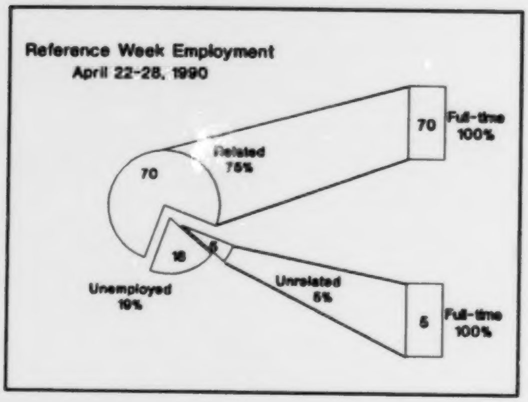
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

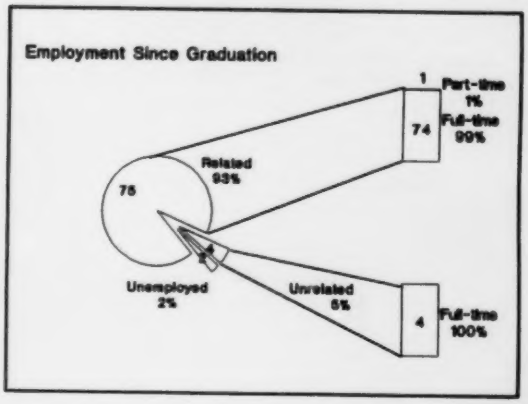
FACULTY OF BUSINESS ADMINISTRATION

Commerce (Co-op)

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	87	4.4	40	46.0	28	7	4	1
1987-88	78	5.2	28	35.9	19	0	8	1
1988-89	128	7.7	95	74.2	75	0	18	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	1.3
$6.01 - $8.00	2	2.5
$8.01 - $10.00	6	7.6
$10.01 - $12.00	17	21.5
$12.01 - $14.00	23	29.1
$14.01 - $16.00	13	16.5
$16.01 OR MORE	17	21.5
UNSPECIFIED	6	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	49	52.7
CLERICAL & RELATED	13	14.0
SALES	11	11.8
OTHER	20	21.5
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	31	39.2
1 MONTH	8	10.1
2-3 MONTHS	9	11.4
4-6 MONTHS	18	22.8
MORE THAN 6 MONTHS	13	16.5
UNSPECIFIED	0	

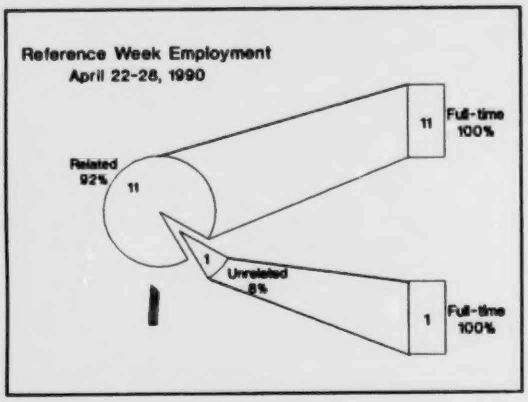
RESIDENCE	#	%
NEWFOUNDLAND	76	80.0
OUT OF PROVINCE	19	20.0
UNSPECIFIED	0	

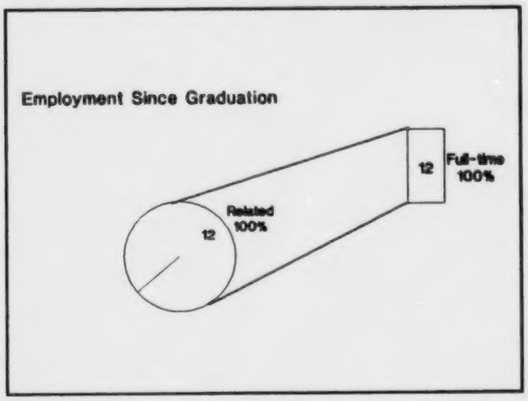
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Commerce (General)

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	4	0.2	1	25.0	1	0	0	0
1987-88	10	0.7	3	30.0	2	1	0	0
1988-89	16	1.0	12	75.0	12	0	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	18.2
$10.01 - $12.00	1	9.1
$12.01 - $14.00	5	45.5
$14.01 - $16.00	1	9.1
$16.01 OR MORE	2	18.2
UNSPECIFIED	0	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	7	58.3
TEACHING & RELATED	2	16.7
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	8.3
OTHER	2	16.7
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	7	58.3
1 MONTH	1	8.3
2-3 MONTHS	1	8.3
4-6 MONTHS	2	16.7
MORE THAN 6 MONTHS	1	8.3
UNSPECIFIED	0	

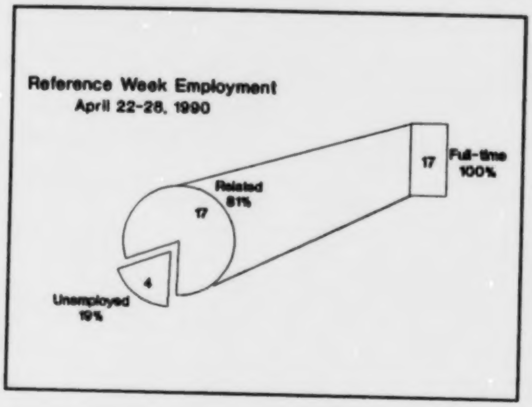
RESIDENCE	#	%
NEWFOUNDLAND	12	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

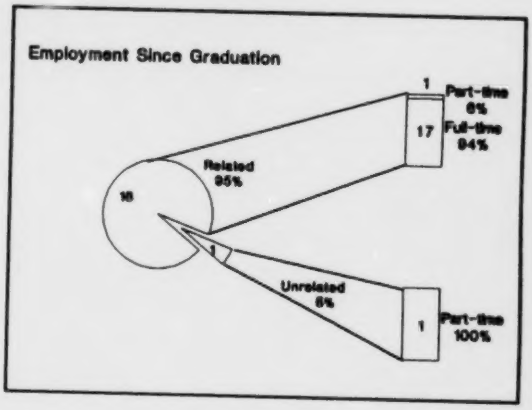
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Commerce (Honours)

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	39	2.0	17	43.6	14	0	0	3
1987-88	24	1.6	11	45.8	9	0	2	0
1988-89	31	1.9	23	74.2	17	0	4	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	8	47.1
$10.01 - $12.00	2	11.8
$12.01 - $14.00	1	5.9
$14.01 - $16.00	2	11.8
$16.01 OR MORE	4	23.5
UNSPECIFIED	4	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	17	85.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	5.0
SOCIAL SCIENCES & RELATED	1	5.0
OTHER	1	5.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	11	64.7
1 MONTH	3	17.6
2-3 MONTHS	0	0.0
4-6 MONTHS	3	17.6
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	3	

RESIDENCE	#	%
NEWFOUNDLAND	16	69.6
OUT OF PROVINCE	7	30.4
UNSPECIFIED	0	

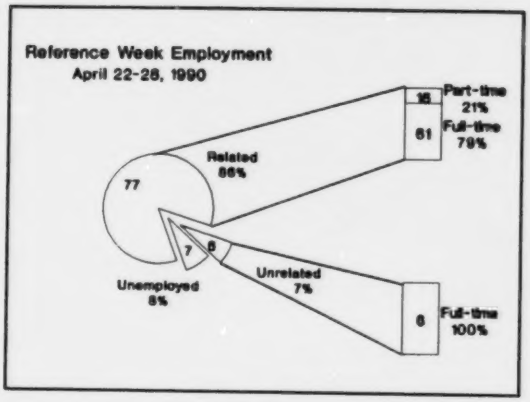
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

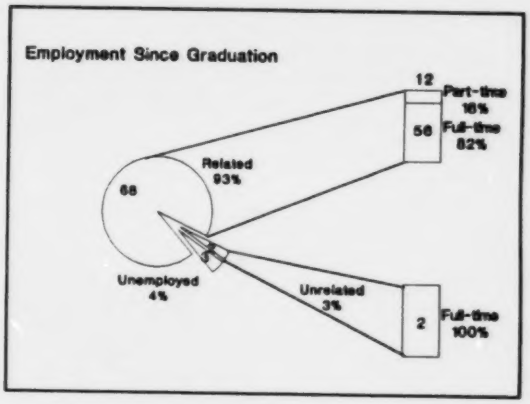
FACULTY OF EDUCATION

Education and Arts Conjoint Degrees

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	119	6.1	61	51.3	18	27	11	5
1987-88	85	5.7	56	65.9	29	16	6	5
1988-89	118	7.1	92	78.0	67	16	7	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	3.9
$8.01 - $10.00	3	3.9
$10.01 - $12.00	6	7.9
$12.01 - $14.00	23	30.3
$14.01 - $16.00	5	6.6
$16.01 OR MORE	36	47.4
UNSPECIFIED	7	

OCCUPATIONS	#	%
TEACHING & RELATED	52	74.3
SOCIAL SCIENCES & RELATED	6	8.6
MANAGERIAL, ADMINISTRATIVE & RELATED	5	7.1
OTHER	7	10.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	26	37.7
1 MONTH	19	27.5
2-3 MONTHS	12	17.4
4-6 MONTHS	7	10.1
MORE THAN 6 MONTHS	5	7.2
UNSPECIFIED	1	

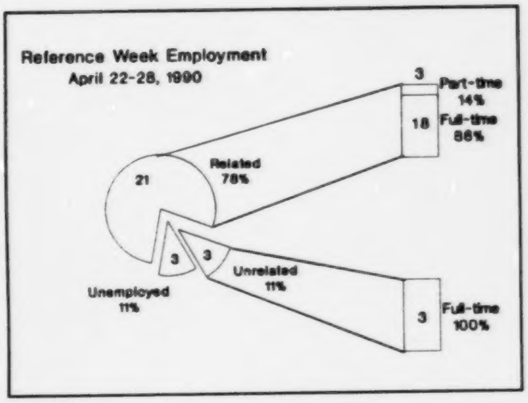
RESIDENCE	#	%
NEWFOUNDLAND	77	83.7
OUT OF PROVINCE	15	16.3
UNSPECIFIED	0	

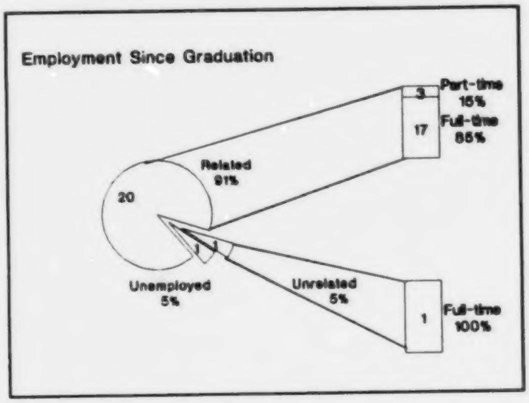
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Education and Arts Conjoint Degrees English

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	36	1.8	17	47.2	7	6	4	0
1987-88	32	2.1	21	65.6	15	4	1	1
1988-89	33	2.0	28	84.8	21	3	3	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	2	8.7
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	8	34.8
$14.01 - $16.00	1	4.3
$16.01 OR MORE	12	52.2
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	16	69.6
SOCIAL SCIENCES & RELATED	3	13.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	4.3
OTHER	3	13.0
UNSPECIFIED	0	

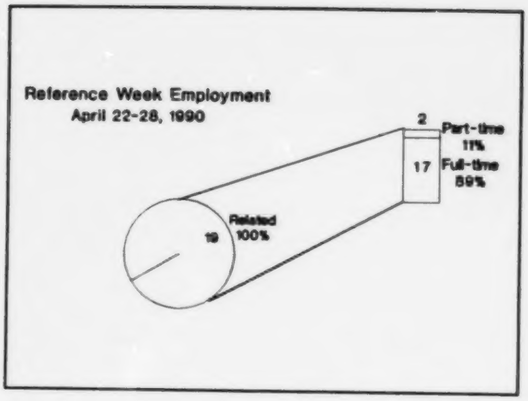
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	9	42.9
1 MONTH	5	23.8
2-3 MONTHS	2	9.5
4-6 MONTHS	2	9.5
MORE THAN 6 MONTHS	3	14.3
UNSPECIFIED	0	

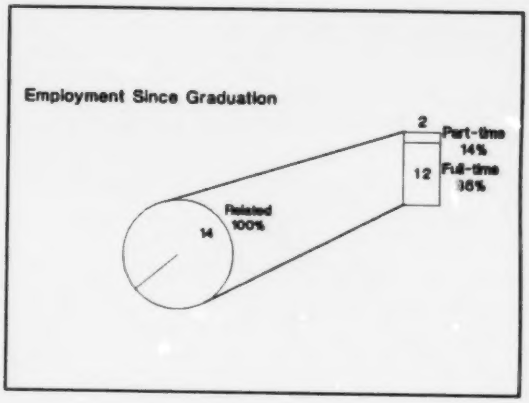
RESIDENCE	#	%
NEWFOUNDLAND	25	89.3
OUT OF PROVINCE	3	10.7
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	23	1.2	15	65.2	3	8	2	2
1987-88	14	0.9	10	71.4	5	3	1	1
1988-89	21	1.3	19	90.5	17	2	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	5.9
$10.01 - $12.00	2	11.8
$12.01 - $14.00	6	35.3
$14.01 - $16.00	2	11.8
$16.01 OR MORE	6	35.3
UNSPECIFIED	2	

OCCUPATIONS	#	%
TEACHING & RELATED	14	82.4
MANAGERIAL, ADMINISTRATIVE & RELATED	1	5.9
SOCIAL SCIENCES & RELATED	1	5.9
OTHER	1	5.9
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	28.6
1 MONTH	8	57.1
2-3 MONTHS	2	14.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

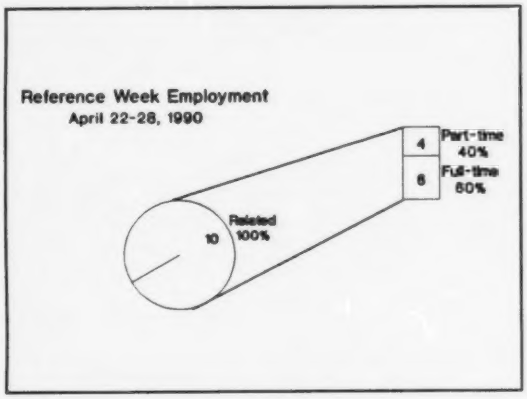
RESIDENCE	#	%
NEWFOUNDLAND	16	84.2
OUT OF PROVINCE	3	15.8
UNSPECIFIED	0	

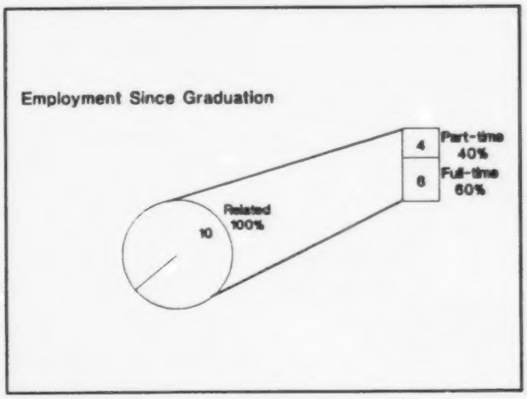
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Geography[1]

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	13	0.7	8	61.5	1	4	1	2
1987-88	8	0.5	6	75.0	1	3	1	1
1988-89	14	0.8	10	71.4	6	4	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	10.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	9	90.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
TEACHING & RELATED	6	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	30.0
1 MONTH	0	0.0
2-3 MONTHS	2	20.0
4-6 MONTHS	3	30.0
MORE THAN 6 MONTHS	2	20.0
UNSPECIFIED	0	

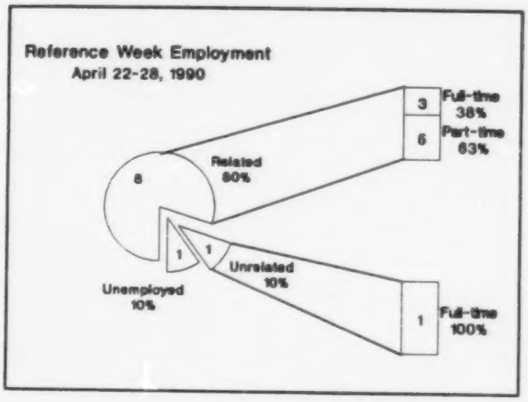
RESIDENCE	#	%
NEWFOUNDLAND	9	90.0
OUT OF PROVINCE	1	10.0
UNSPECIFIED	0	

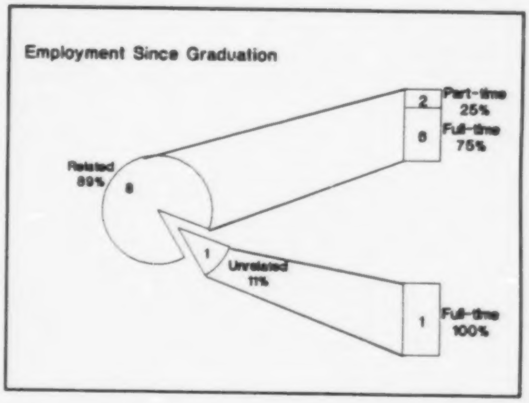
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Cultural/Historical, Cartography, Economic and Physical options were consolidated with the Geography major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	16	0.8	9	56.3	2	6	1	0
1987-88	14	0.9	9	64.3	3	4	1	1
1988-89	18	1.1	10	55.6	4	5	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	2	28.6
$10.01 - $12.00	2	28.6
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	3	42.9
UNSPECIFIED	2	

OCCUPATIONS	#	%
MANAGERIAL, ADMINISTRATIVE & RELATED	1	25.0
SOCIAL SCIENCES & RELATED	1	25.0
TEACHING & RELATED	1	25.0
OTHER	1	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	33.3
1 MONTH	2	22.2
2-3 MONTHS	2	22.2
4-6 MONTHS	2	22.2
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	9	90.0
OUT OF PROVINCE	1	10.0
UNSPECIFIED	0	

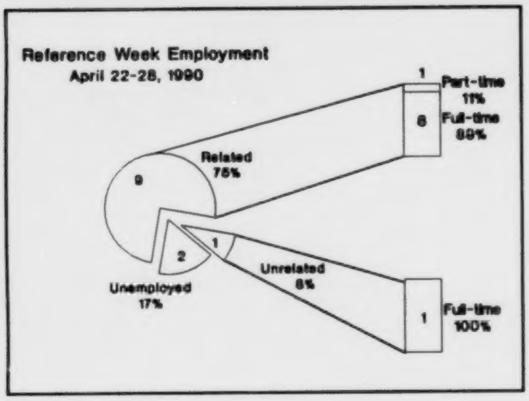
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

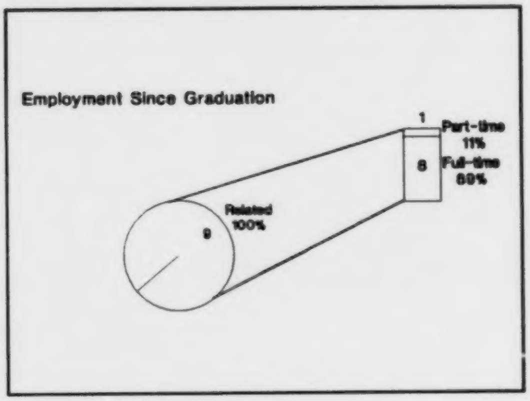
Education and Arts Conjoint Degrees

Religious Studies[1]

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	22	1.1	9	40.9	3	3	3	0
1987-88	9	0.6	5	55.6	2	0	2	1
1988-89	17	1.0	12	70.6	9	1	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	10.0
$12.01 - $14.00	6	60.0
$14.01 - $16.00	1	10.0
$16.01 OR MORE	2	20.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	8	80.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	10.0
SPORT & RECREATION	1	10.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	50.0
1 MONTH	3	37.5
2-3 MONTHS	1	12.5
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

RESIDENCE	#	%
NEWFOUNDLAND	9	75.0
OUT OF PROVINCE	3	25.0
UNSPECIFIED	0	

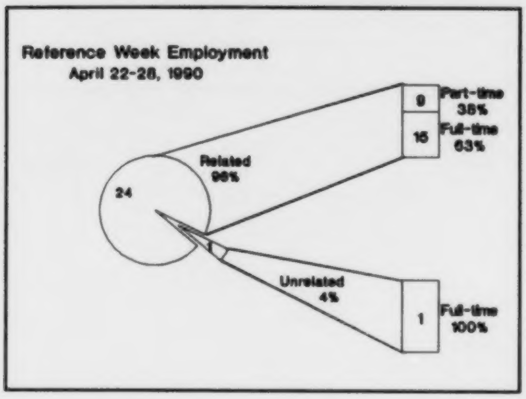
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

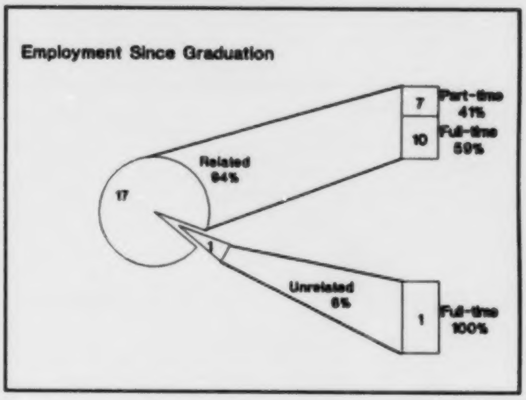
1. To enable reporting, the Biblical Studies, Christian Theology and World Religions options were consolidated with the Religious Studies major.

Education and Physical Education Conjoint Degrees

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	48	2.4	26	54.2	8	7	8	3
1987-88	28	1.9	14	50.0	9	4	0	1
1988-89	27	1.6	25	92.6	16	9	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	4.3
$6.01 - $8.00	1	4.3
$8.01 - $10.00	3	13.0
$10.01 - $12.00	2	8.7
$12.01 - $14.00	4	17.4
$14.01 - $16.00	0	0.0
$16.01 OR MORE	12	52.2
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	14	87.5
SPORT & RECREATION	1	6.3
SALES	1	6.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	25.0
1 MONTH	5	31.3
2-3 MONTHS	5	31.3
4-6 MONTHS	2	12.5
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

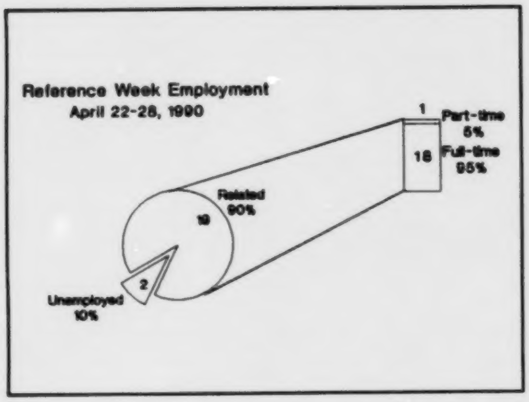
RESIDENCE	#	%
NEWFOUNDLAND	24	96.0
OUT OF PROVINCE	1	4.0
UNSPECIFIED	0	

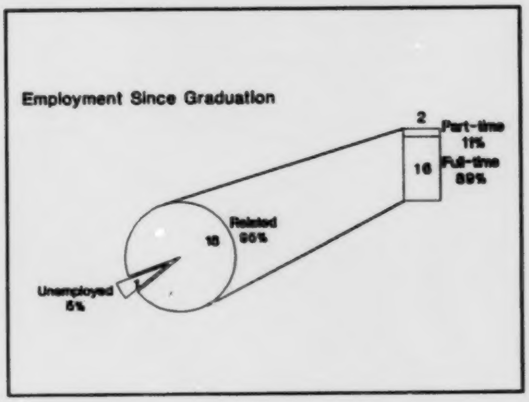
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Education and Science Conjoint Degrees

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	38	1.9	26	68.4	9	9	3	5
1987-88	30	2.0	19	63.3	8	4	3	4
1988-89	25	1.5	21	84.0	18	1	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	5	27.8
$14.01 - $16.00	3	16.7
$16.01 OR MORE	10	55.6
UNSPECIFIED	2	

OCCUPATIONS	#	%
TEACHING & RELATED	18	100
UNSPECIFIED	0	

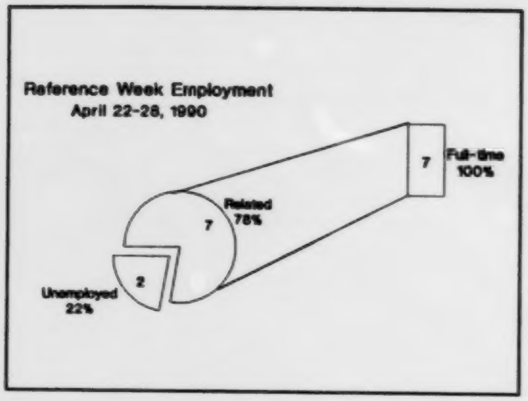
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	22.2
1 MONTH	8	44.4
2-3 MONTHS	3	16.7
4-6 MONTHS	3	16.7
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

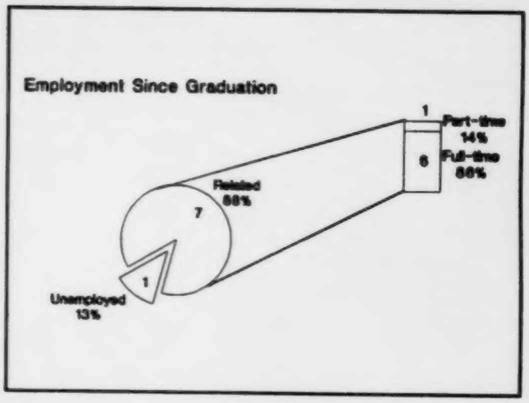
RESIDENCE	#	%
NEWFOUNDLAND	19	90.5
OUT OF PROVINCE	2	9.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	10	0.5	7	70.0	2	3	0	2
1987-88	10	0.7	9	90.0	5	3	0	1
1988-89	10	0.6	9	90.0	7	0	2	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	3	42.9
$14.01 - $16.00	1	14.3
$16.01 OR MORE	3	42.9
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	7	100
UNSPECIFIED	0	

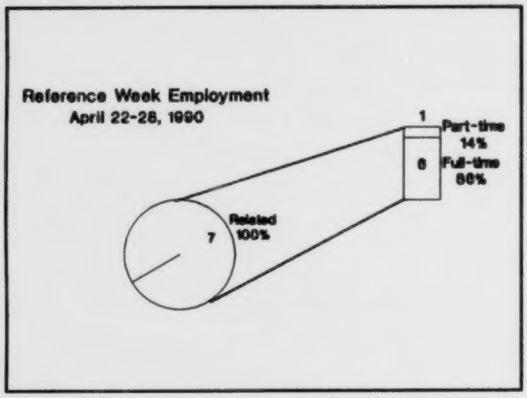
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	14.3
1 MONTH	5	71.4
2-3 MONTHS	1	14.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

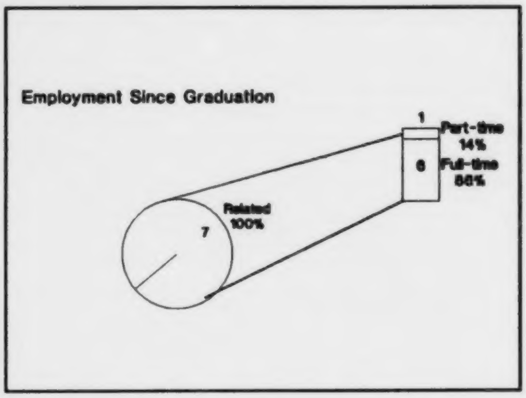
RESIDENCE	#	%
NEWFOUNDLAND	8	88.9
OUT OF PROVINCE	1	11.1
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	19	1.0	14	73.7	4	4	3	3
1987-88	11	0.7	6	54.5	1	1	2	2
1988-89	8	0.5	7	87.5	6	1	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	14.3
$14.01 - $16.00	0	0.0
$16.01 OR MORE	6	85.7
UNSPECIFIED	0	

OCCUPATIONS	#	%
TEACHING & RELATED	6	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	28.6
1 MONTH	2	28.6
2-3 MONTHS	2	28.6
4-6 MONTHS	1	14.3
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

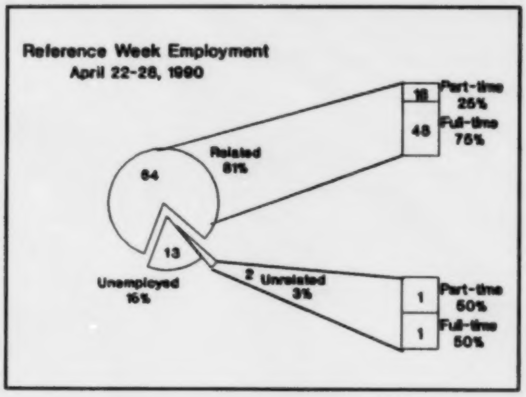
RESIDENCE	#	%
NEWFOUNDLAND	7	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

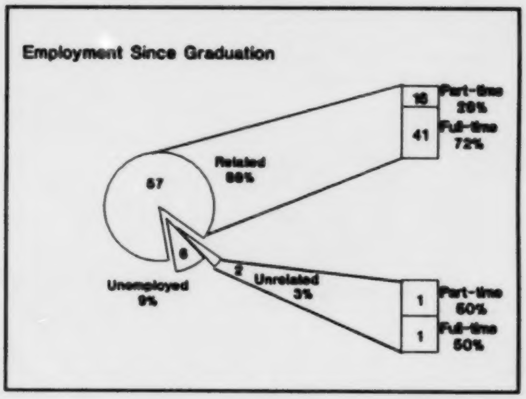
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Education (Elementary)[1]

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	285	14.5	186	65.3	35	106	19	26
1987-88	144	9.6	85	59.0	44	23	10	8
1988-89	112	6.7	83	74.1	49	17	13	4

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	4	6.2
$6.01 - $8.00	1	1.5
$8.01 - $10.00	3	4.6
$10.01 - $12.00	8	12.3
$12.01 - $14.00	9	13.8
$14.01 - $16.00	7	10.8
$16.01 OR MORE	33	50.8
UNSPECIFIED	8	

OCCUPATIONS	#	%
TEACHING & RELATED	44	81.5
SERVICE	4	7.4
SOCIAL SCIENCES & RELATED	3	5.6
OTHER	3	5.6
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	18	32.1
1 MONTH	13	23.2
2-3 MONTHS	16	28.6
4-6 MONTHS	7	12.5
MORE THAN 6 MONTHS	2	3.6
UNSPECIFIED	4	

RESIDENCE	#	%
NEWFOUNDLAND	71	85.5
OUT OF PROVINCE	12	14.5
UNSPECIFIED	0	

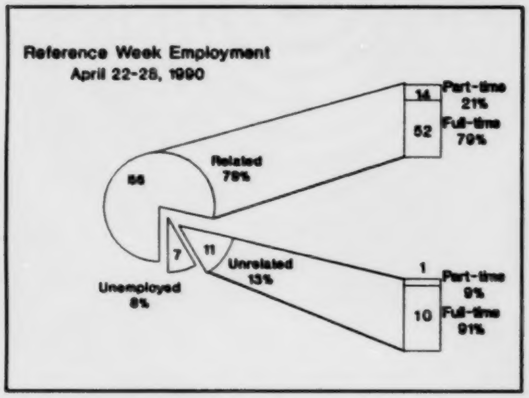
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

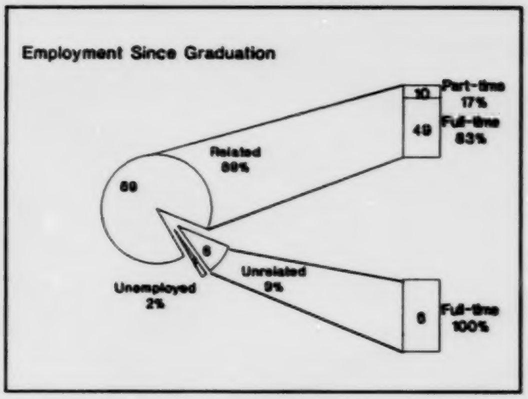
1. This degree replaced the Arts (Education) degree with an Elementary major. There were 180, 57 and 13 graduates in the old degree program for 1986-87, 1987-88 and 1988-89, respectively.

Education (High School)

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	129	6.6	65	50.4	25	28	8	4
1987-88	117	7.8	51	43.6	33	9	5	4
1988-89	120	7.2	86	71.7	62	15	7	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	1.6
$10.01 - $12.00	4	6.6
$12.01 - $14.00	15	24.6
$14.01 - $16.00	16	26.2
$16.01 OR MORE	25	41.0
UNSPECIFIED	11	

OCCUPATIONS	#	%
TEACHING & RELATED	49	72.1
SOCIAL SCIENCES & RELATED	7	10.3
CLERICAL & RELATED	3	4.4
OTHER	9	13.2
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	32	50.0
1 MONTH	9	14.1
2-3 MONTHS	8	12.5
4-6 MONTHS	9	14.1
MORE THAN 6 MONTHS	6	9.4
UNSPECIFIED	1	

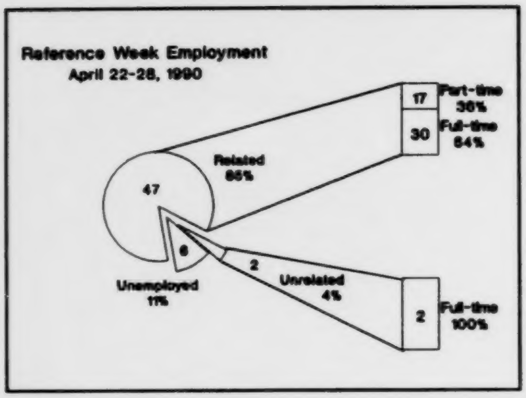
RESIDENCE	#	%
NEWFOUNDLAND	66	76.7
OUT OF PROVINCE	20	23.3
UNSPECIFIED	0	

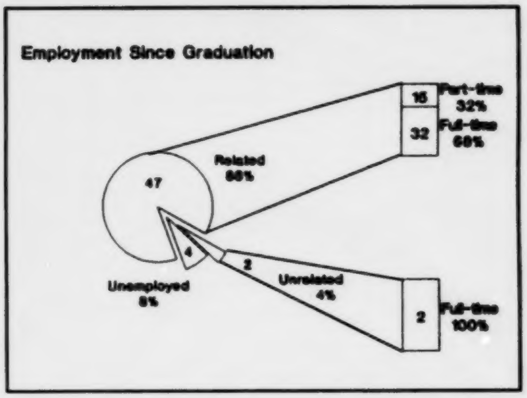
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

Education (Primary)[1]

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	192	9.8	116	60.4	27	66	10	13
1987-88	97	6.5	51	52.6	25	15	3	8
1988-89	73	4.4	59	80.8	32	17	6	4

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	3	6.4
$6.01 - $8.00	2	4.3
$8.01 - $10.00	2	4.3
$10.01 - $12.00	3	6.4
$12.01 - $14.00	10	21.3
$14.01 - $16.00	5	10.6
$16.01 OR MORE	22	46.8
UNSPECIFIED	5	

OCCUPATIONS	#	%
TEACHING & RELATED	27	81.8
SERVICE	4	12.1
SOCIAL SCIENCES & RELATED	1	3.0
OTHER	1	3.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	13.3
1 MONTH	12	26.7
2-3 MONTHS	20	44.4
4-6 MONTHS	4	8.9
MORE THAN 6 MONTHS	3	6.7
UNSPECIFIED	4	

RESIDENCE	#	%
NEWFOUNDLAND	52	88.1
OUT OF PROVINCE	7	11.9
UNSPECIFIED	0	

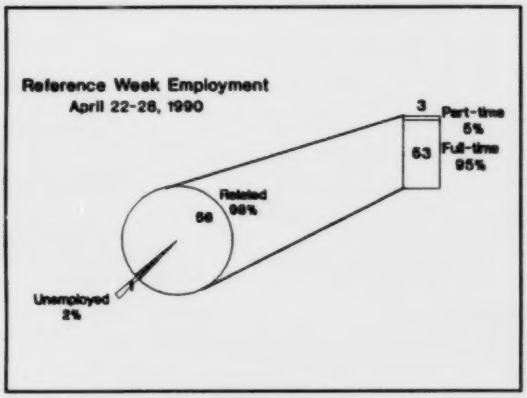
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

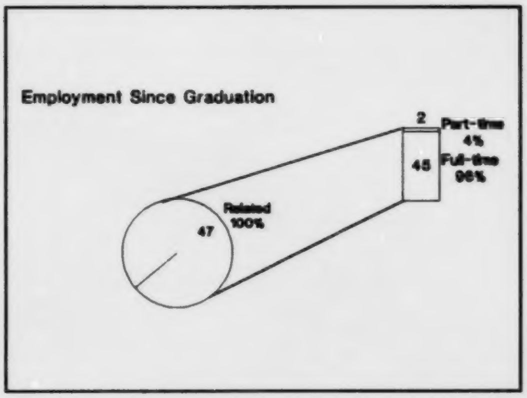
1. This degree replaced the Arts (Education) degree with a Primary major. There were 98, 31 and 2 graduates in the old degree program for 1986-87, 1987-88 and 1988-89, respectively.

Special Education

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	77	3.9	49	63.6	11	37	1	0
1987-88	75	5.0	45	60.0	40	3	0	2
1988-89	79	4.7	58	73.4	53	3	1	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	1.9
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	2	3.8
$14.01 - $16.00	9	17.3
$16.01 OR MORE	40	76.9
UNSPECIFIED	6	

OCCUPATIONS	#	%
TEACHING & RELATED	54	98.2
MANAGERIAL, ADMINISTRATIVE & RELATED	1	1.8
UNSPECIFIED	0	

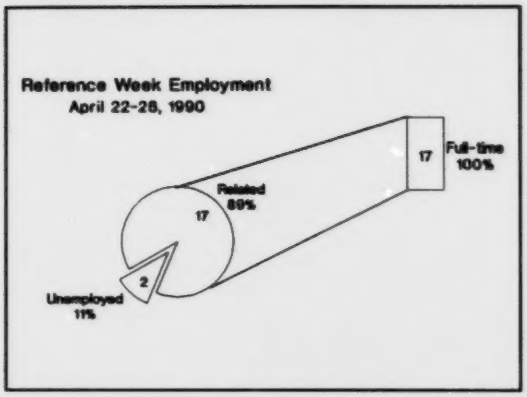
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	31	67.4
1 MONTH	7	15.2
2-3 MONTHS	5	10.9
4-6 MONTHS	2	4.3
MORE THAN 6 MONTHS	1	2.2
UNSPECIFIED	1	

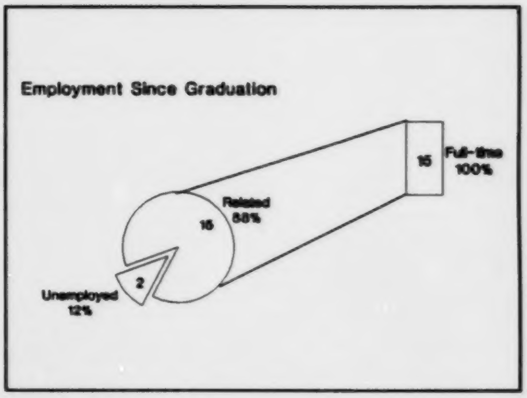
RESIDENCE	#	%
NEWFOUNDLAND	58	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	28	1.4	16	57.1	12	3	0	1
1987-88	28	1.9	17	60.7	15	1	1	0
1988-89	24	1.4	21	87.5	17	0	2	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	3	23.1
$14.01 - $16.00	0	0.0
$16.01 OR MORE	10	76.9
UNSPECIFIED	4	

OCCUPATIONS	#	%
TEACHING & RELATED	7	50.0
MANAGERIAL, ADMINISTRATIVE & RELATED	2	14.3
CLERICAL & RELATED	2	14.3
OTHER	3	21.4
UNSPECIFIED	3	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	10	83.3
1 MONTH	1	8.3
2-3 MONTHS	1	8.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	3	

RESIDENCE	#	%
NEWFOUNDLAND	20	95.2
OUT OF PROVINCE	1	4.8
UNSPECIFIED	0	

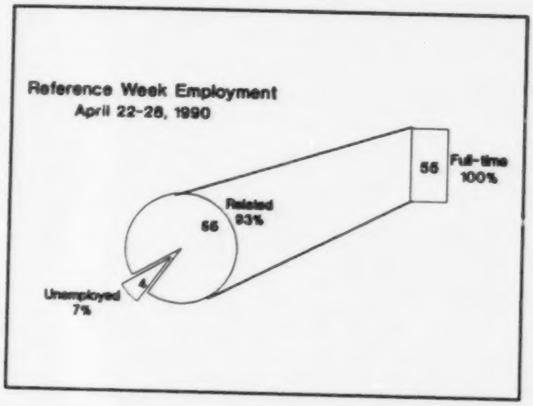
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

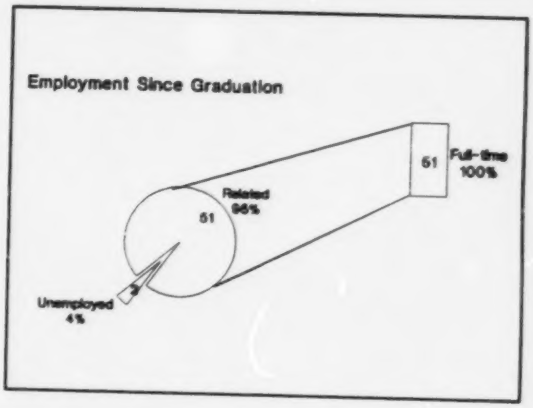
FACULTY OF ENGINEERING AND APPLIED SCIENCE

All Engineering Programs

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	107	5.4	63	58.9	56	5	0	2
1987-88	91	6.1	52	57.1	41	3	5	3
1988-89	97	5.8	60	61.9	55	0	4	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	1.8
$8.01 - $10.00	1	1.8
$10.01 - $12.00	1	1.8
$12.01 - $14.00	2	3.6
$14.01 - $16.00	17	30.4
$16.01 OR MORE	34	60.7
UNSPECIFIED	2	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	49	84.5
MANAGERIAL, ADMINISTRATIVE & RELATED	4	6.9
MINING & QUARRYING (INC OIL & GAS)	2	3.4
OTHER	3	5.2
UNSPECIFIED	0	

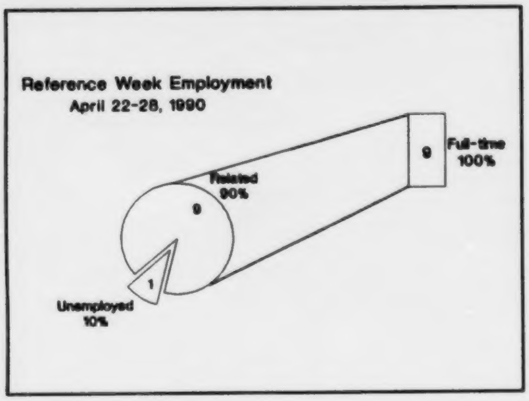
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	34	66.7
1 MONTH	2	3.9
2-3 MONTHS	7	13.7
4-6 MONTHS	5	9.8
MORE THAN 6 MONTHS	3	5.9
UNSPECIFIED	0	

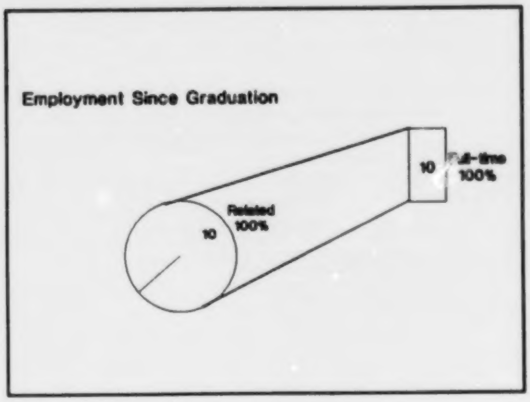
RESIDENCE	#	%
NEWFOUNDLAND	37	62.7
OUT OF PROVINCE	22	37.3
UNSPECIFIED	1	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	30	1.5	17	56.7	15	1	0	1
1987-88	19	1.3	13	68.4	11	0	0	2
1988-89	15	0.9	10	66.7	9	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	1	10.0
$14.01 - $16.00	5	50.0
$16.01 OR MORE	4	40.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	7	70.0
MANAGERIAL, ADMINISTRATIVE & RELATED	2	20.0
CONSTRUCTION TRADES	1	10.0
UNSPECIFIED	0	

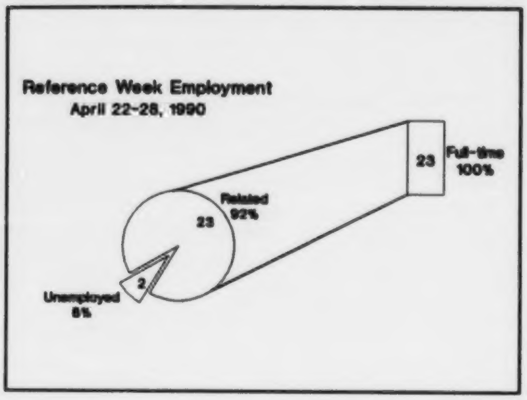
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	9	90.0
1 MONTH	0	0.0
2-3 MONTHS	1	10.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

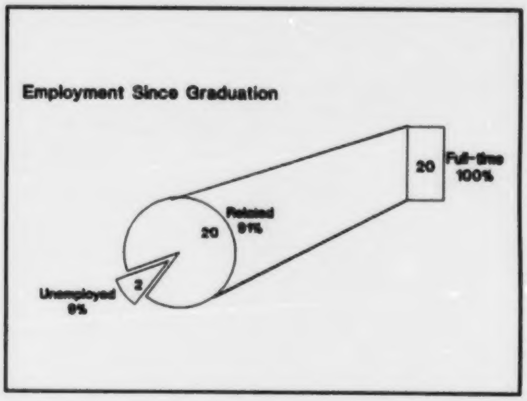
RESIDENCE	#	%
NEWFOUNDLAND	9	90.0
OUT OF PROVINCE	1	10.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	43	2.2	24	55.8	20	3	0	1
1987-88	27	1.8	14	51.9	13	1	0	0
1988-89	39	2.3	26	66.7	23	0	2	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	4.3
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	2	8.7
$16.01 OR MORE	20	87.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	24	100
UNSPECIFIED	0	

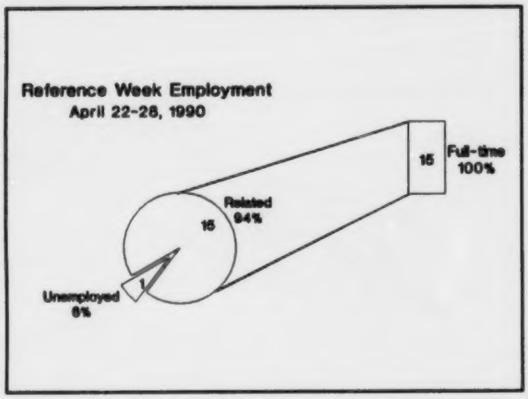
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	13	65.0
1 MONTH	1	5.0
2-3 MONTHS	3	15.0
4-6 MONTHS	1	5.0
MORE THAN 6 MONTHS	2	10.0
UNSPECIFIED	0	

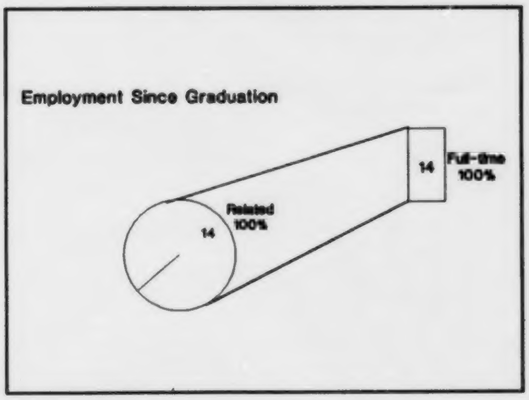
RESIDENCE	#	%
NEWFOUNDLAND	16	61.5
OUT OF PROVINCE	10	38.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	27	1.4	19	70.4	19	0	0	0
1987-88	31	2.1	16	51.6	13	0	2	1
1988-89	29	1.7	16	55.2	15	0	1	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	6.7
$10.01 - $12.00	1	6.7
$12.01 - $14.00	1	6.7
$14.01 - $16.00	6	40.0
$16.01 OR MORE	6	40.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	12	75.0
MINING & QUARRYING (INC OIL & GAS)	2	12.5
MANAGERIAL, ADMINISTRATIVE & RELATED	1	6.3
OTHER	1	6.3
UNSPECIFIED	0	

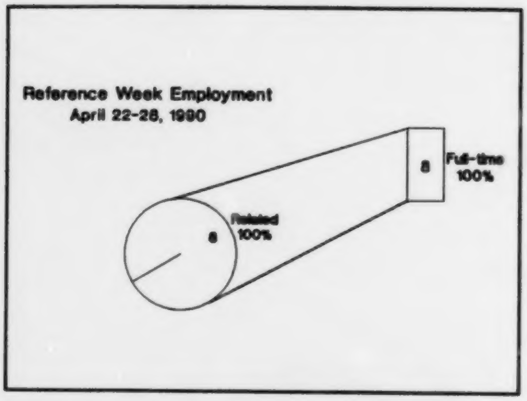
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	7	50.0
1 MONTH	1	7.1
2-3 MONTHS	2	14.3
4-6 MONTHS	4	28.6
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

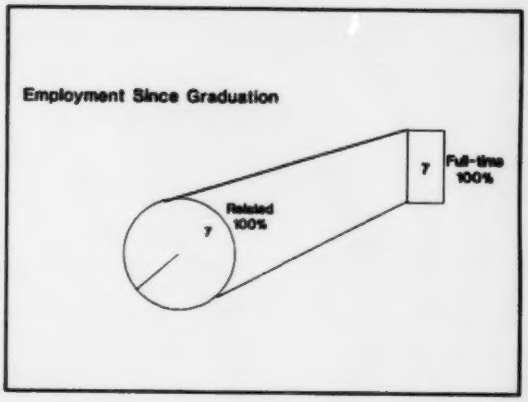
RESIDENCE	#	%
NEWFOUNDLAND	11	73.3
OUT OF PROVINCE	4	26.7
UNSPECIFIED	1	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	7	0.4	3	42.9	2	1	0	0
1987-88	13	0.9	9	69.2	4	2	3	0
1988-89	13	0.8	8	61.5	8	0	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	4	50.0
$16.01 OR MORE	4	50.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	6	75.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	12.5
SERVICE	1	12.5
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	5	71.4
1 MONTH	0	0.0
2-3 MONTHS	1	14.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	1	14.3
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	1	12.5
OUT OF PROVINCE	7	87.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

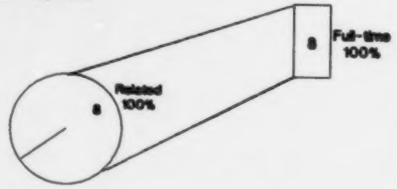
SCHOOL OF MUSIC

Music Education and Music Conjoint Degrees

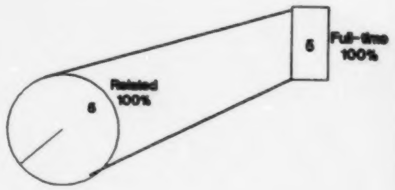
ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	9	0.5	7	77.8	3	4	0	0
1987-88	7	0.5	0	0.0	0	0	0	0
1988-89	9	0.5	8	88.9	8	0	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES

Reference Week Employment
April 22-28, 1990



Employment Since Graduation



WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	14.3
$12.01 - $14.00	4	57.1
$14.01 - $16.00	0	0.0
$16.01 OR MORE	2	28.6
UNSPECIFIED	1	

OCCUPATIONS	#	%
TEACHING & RELATED	8	100
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	40.0
1 MONTH	3	60.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	8	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

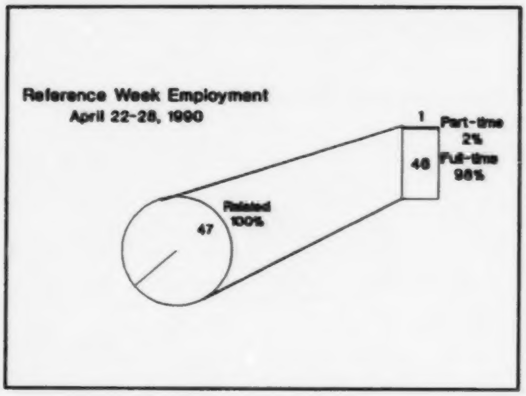
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

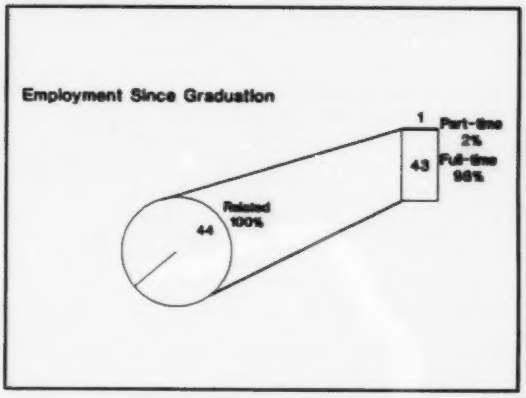
SCHOOL OF NURSING

All Nursing Programs

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	1	0.1	1	100	1	0	0	0
1987-88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	65	3.9	49	75.4	46	1	0	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	24	49.0
$14.01 - $16.00	13	26.5
$16.01 OR MORE	12	24.5
UNSPECIFIED	0	

OCCUPATIONS	#	%
MEDICINE & HEALTH	43	91.5
TEACHING & RELATED	3	6.4
SALES	1	2.1
UNSPECIFIED	0	

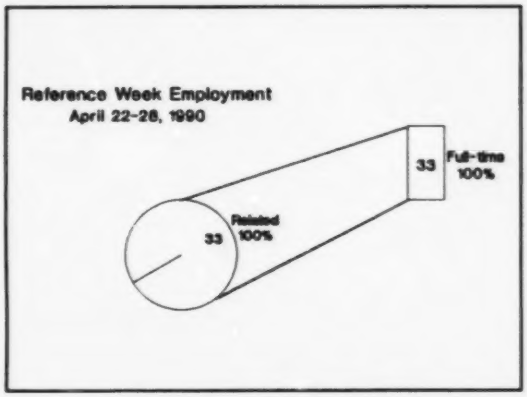
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	36	81.8
1 MONTH	5	11.4
2-3 MONTHS	3	6.8
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

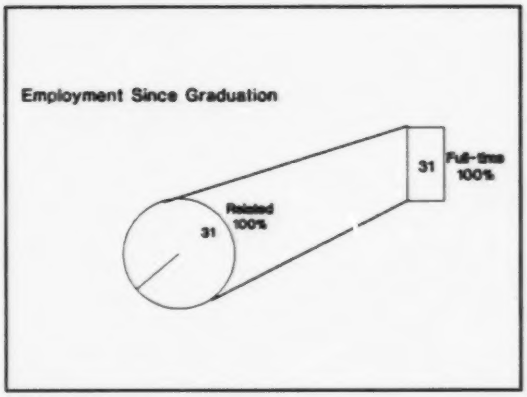
RESIDENCE	#	%
NEWFOUNDLAND	41	83.7
OUT OF PROVINCE	8	16.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	1	0.1	1	100	1	0	0	0
1987-88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	45	2.7	34	75.6	33	0	0	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	19	55.9
$14.01 - $16.00	9	26.5
$16.01 OR MORE	6	17.6
UNSPECIFIED	0	

OCCUPATIONS	#	%
MEDICINE & HEALTH	33	97.1
SALES	1	2.9
UNSPECIFIED	0	

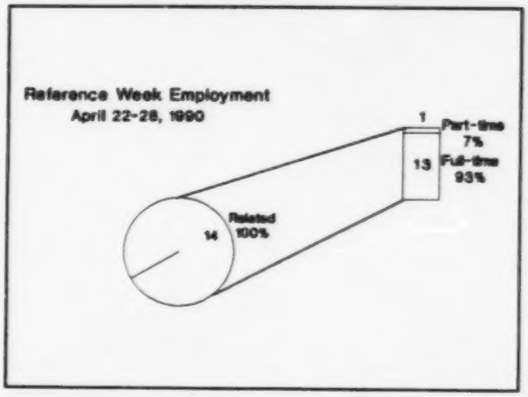
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	28	90.3
1 MONTH	3	9.7
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

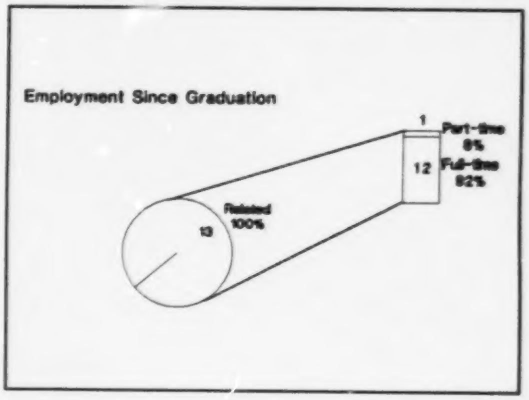
RESIDENCE	#	%
NEWFOUNDLAND	27	79.4
OUT OF PROVINCE	7	20.6
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1987-88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988-89	20	1.2	15	75.0	13	1	0	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	5	33.3
$14.01 - $16.00	4	26.7
$16.01 OR MORE	6	40.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
MEDICINE & HEALTH	10	76.9
TEACHING & RELATED	3	23.1
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	8	61.5
1 MONTH	2	15.4
2-3 MONTHS	3	23.1
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	14	93.3
OUT OF PROVINCE	1	6.7
UNSPECIFIED	0	

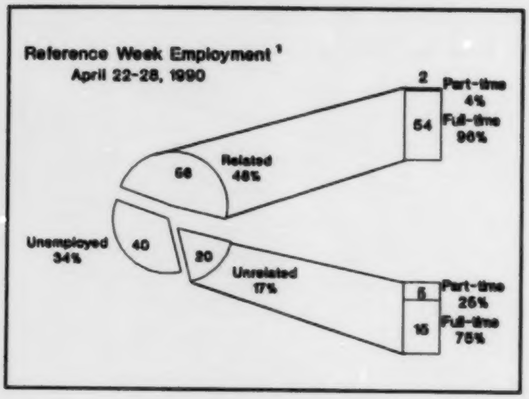
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

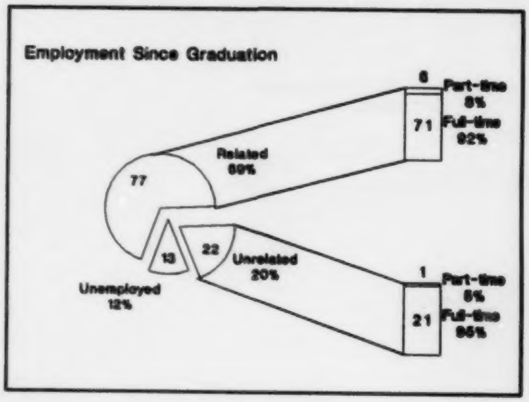
FACULTY OF SCIENCE

All Science Programs

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	233	11.9	110	47.2	71	10	9	20
1987-88	179	12.0	96	53.6	48	5	22	21
1988-89	205	12.3	145	70.7	70	7	40	28

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	6	7.3
$6.01 - $8.00	8	9.8
$8.01 - $10.00	11	13.4
$10.01 - $12.00	19	23.2
$12.01 - $14.00	17	20.7
$14.01 - $16.00	7	8.5
$16.01 OR MORE	14	17.1
UNSPECIFIED	7	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	30	29.7
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	16	15.8
CLERICAL & RELATED	11	10.9
OTHER	44	43.6
UNSPECIFIED	8	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	55	59.8
1 MONTH	17	18.5
2-3 MONTHS	11	12.0
4-6 MONTHS	4	4.3
MORE THAN 6 MONTHS	5	5.4
UNSPECIFIED	10	

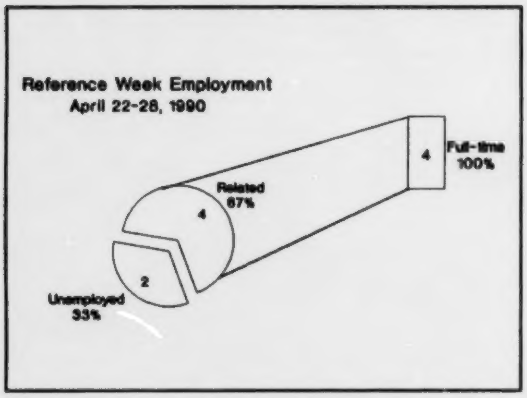
RESIDENCE	#	%
NEWFOUNDLAND	123	85.4
OUT OF PROVINCE	21	14.6
UNSPECIFIED	1	

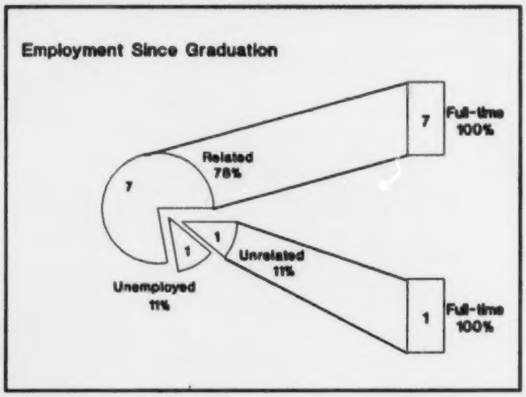
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. 1 worked full-time in reference week but did not specify relationship between job and training.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	15	0.8	4	26.7	3	0	1	0
1987-88	13	0.9	8	61.5	1	0	1	6
1988-89	18	1.1	11	61.1	4	0	2	5

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	3	50.0
$8.01 - $10.00	1	16.7
$10.01 - $12.00	0	0.0
$12.01 - $14.00	0	0.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	2	33.3
UNSPECIFIED	2	

OCCUPATIONS	#	%
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	3	37.5
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	12.5
TEACHING & RELATED	1	12.5
OTHER	3	37.5
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	6	85.7
1 MONTH	1	14.3
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

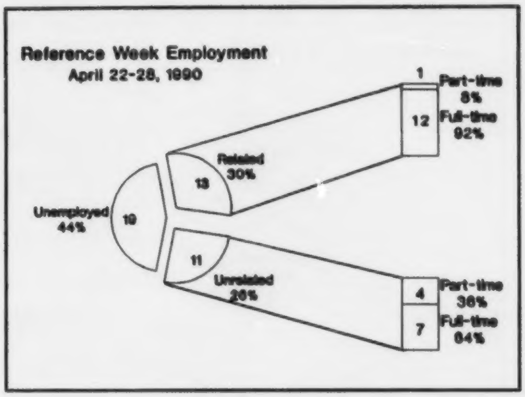
RESIDENCE	#	%
NEWFOUNDLAND	9	81.8
OUT OF PROVINCE	2	18.2
UNSPECIFIED	0	

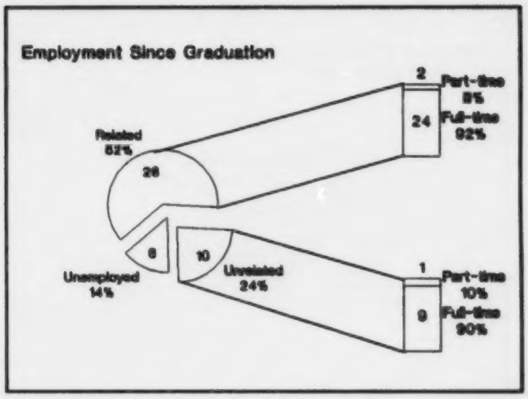
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Dietetics, Food Science and Nutrition options were consolidated with the Biochemistry major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	57	2.9	23	40.4	12	3	3	5
1987-88	44	2.9	20	45.5	9	1	6	4
1988-89	74	4.4	54	73.0	19	5	19	11

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	4	17.4
$6.01 - $8.00	3	13.0
$8.01 - $10.00	5	21.7
$10.01 - $12.00	6	26.1
$12.01 - $14.00	4	17.4
$14.01 - $16.00	0	0.0
$16.01 OR MORE	1	4.3
UNSPECIFIED	4	

OCCUPATIONS	#	%
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	9	30.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	6	20.0
CLERICAL & RELATED	3	10.0
OTHER	12	40.0
UNSPECIFIED	5	

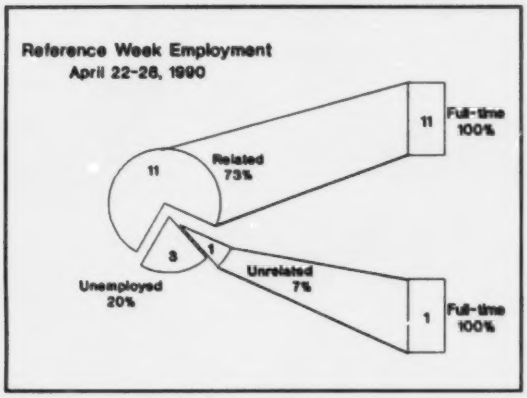
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	20	64.5
1 MONTH	4	12.9
2-3 MONTHS	2	6.5
4-6 MONTHS	2	6.5
MORE THAN 6 MONTHS	3	9.7
UNSPECIFIED	6	

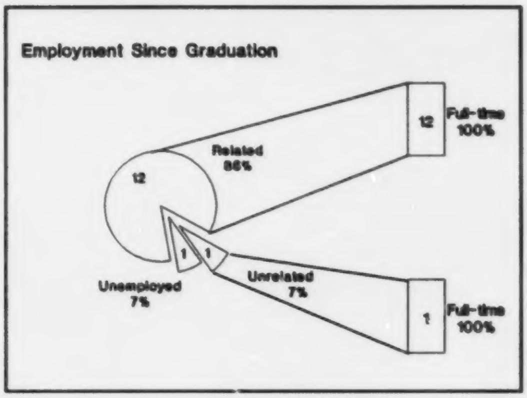
RESIDENCE	#	%
NEWFOUNDLAND	49	90.7
OUT OF PROVINCE	5	9.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	37	1.9	18	48.6	15	0	0	3
1987-88	28	1.9	17	60.7	13	0	2	2
1988-89	23	1.4	15	65.2	12	0	3	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	1	7.7
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	7.7
$12.01 - $14.00	4	30.8
$14.01 - $16.00	2	15.4
$16.01 OR MORE	5	38.5
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	6	42.9
MANAGERIAL, ADMINISTRATIVE & RELATED	3	21.4
TEACHING & RELATED	1	7.1
OTHER	4	28.6
UNSPECIFIED	0	

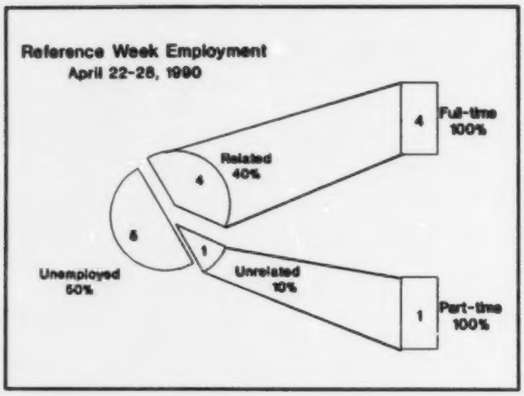
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	8	61.5
1 MONTH	1	7.7
2-3 MONTHS	4	30.8
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

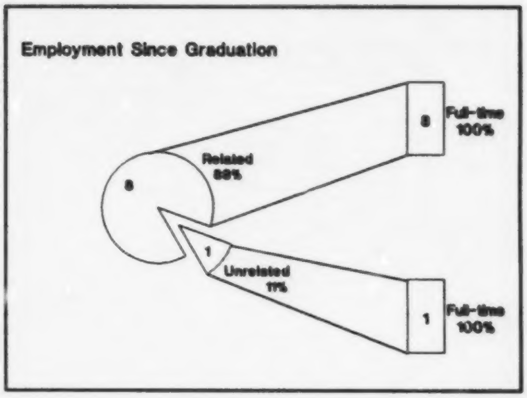
RESIDENCE	#	%
NEWFOUNDLAND	10	66.7
OUT OF PROVINCE	5	33.3
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	19	1.0	7	36.8	4	2	0	1
1987-88	26	1.7	16	61.5	12	0	4	0
1988-89	15	0.9	11	73.3	4	1	5	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	11.1
$6.01 - $8.00	1	11.1
$8.01 - $10.00	1	11.1
$10.01 - $12.00	0	0.0
$12.01 - $14.00	2	22.2
$14.01 - $16.00	1	11.1
$16.01 OR MORE	3	33.3
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	7	70.0
MANAGERIAL, ADMINISTRATIVE & RELATED	1	10.0
SERVICE	1	10.0
OTHER	1	10.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	44.4
1 MONTH	3	33.3
2-3 MONTHS	2	22.2
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

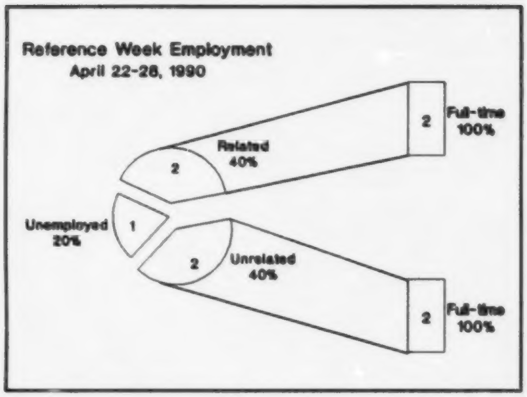
RESIDENCE	#	%
NEWFOUNDLAND	8	72.7
OUT OF PROVINCE	3	27.3
UNSPECIFIED	0	

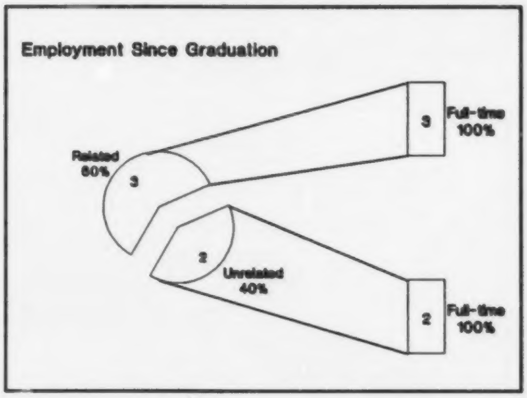
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Geology and Geophysics options were consolidated.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	32	1.6	18	56.3	11	2	3	2
1987-88	17	1.1	8	47.1	2	1	3	2
1988-89	9	0.5	6	66.7	4	0	1	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	1	50.0
$12.01 - $14.00	1	50.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	2	40.0
SALES	2	40.0
CLERICAL & RELATED	1	20.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	75.0
1 MONTH	1	25.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

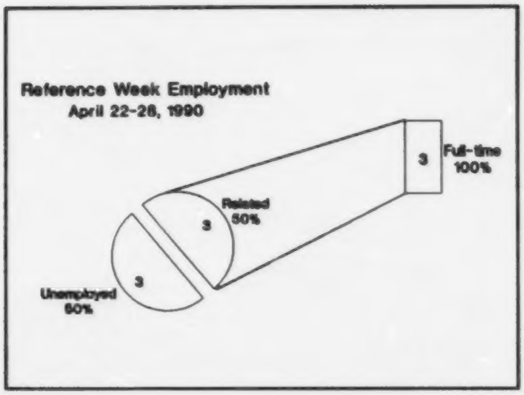
RESIDENCE	#	%
NEWFOUNDLAND	6	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

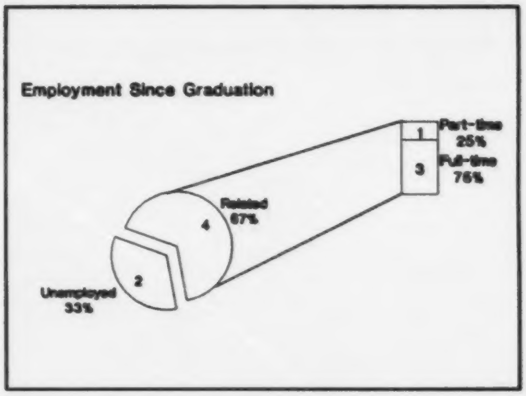
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Cultural/Historical, Cartography, Economic and Physical options were consolidated with the Geography major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	28	1.4	11	39.3	6	0	0	5
1987-88	15	1.0	5	33.3	4	0	0	1
1988-89	18	1.1	8	44.4	3	0	3	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	2	40.0
$12.01 - $14.00	2	40.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	1	20.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
TEACHING & RELATED	2	50.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	25.0
CLERICAL & RELATED	1	25.0
UNSPECIFIED	0	

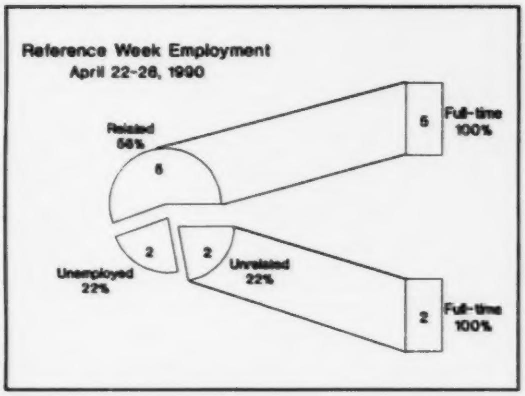
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	50.0
1 MONTH	2	50.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

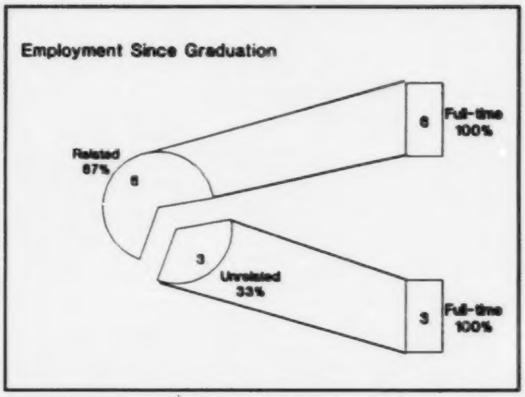
RESIDENCE	#	%
NEWFOUNDLAND	8	100
OUT OF PROVINCE	0	0.0
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	8	0.4	4	50.0	4	0	0	0
1987-88	7	0.5	5	71.4	1	1	1	2
1988-89	17	1.0	12	70.6	8	0	2	2

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	14.3
$10.01 - $12.00	2	28.6
$12.01 - $14.00	1	14.3
$14.01 - $16.00	3	42.9
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	3	30.0
SERVICE	2	20.0
OCCUPATIONS NOT ELSEWHERE CLASSIFIED	2	20.0
OTHER	3	30.0
UNSPECIFIED	2	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	44.4
1 MONTH	2	22.2
2-3 MONTHS	1	11.1
4-6 MONTHS	1	11.1
MORE THAN 6 MONTHS	1	11.1
UNSPECIFIED	0	

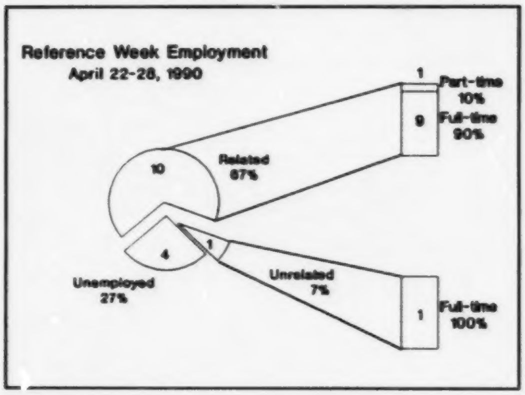
RESIDENCE	#	%
NEWFOUNDLAND	9	81.8
OUT OF PROVINCE	2	18.2
UNSPECIFIED	1	

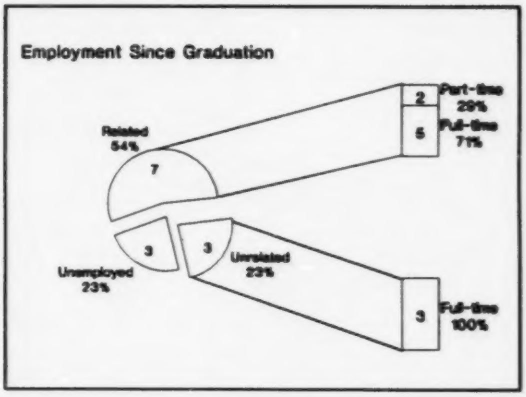
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. 1 worked full-time in reference week but did not specify relationship between job and training.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	29	1.5	20	69.0	12	3	1	4
1987-88	19	1.3	11	57.9	5	1	3	2
1988-89	21	1.3	19	90.5	10	1	4	4

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	9.1
$10.01 - $12.00	7	63.6
$12.01 - $14.00	0	0.0
$14.01 - $16.00	1	9.1
$16.01 OR MORE	2	18.2
UNSPECIFIED	0	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	6	50.0
CLERICAL & RELATED	3	25.0
TEACHING & RELATED	2	16.7
OTHER	1	8.3
UNSPECIFIED	0	

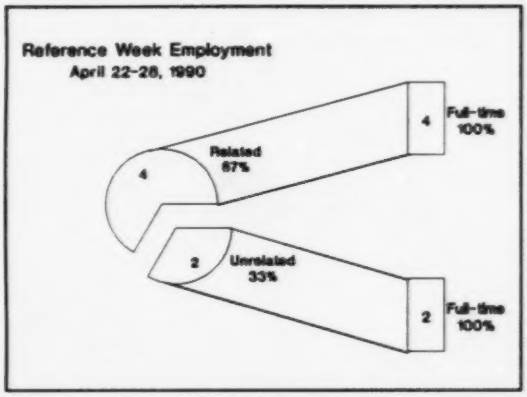
EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	4	40.0
1 MONTH	3	30.0
2-3 MONTHS	1	10.0
4-6 MONTHS	1	10.0
MORE THAN 6 MONTHS	1	10.0
UNSPECIFIED	1	

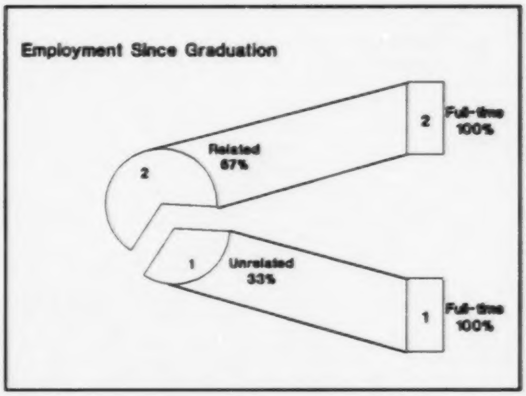
RESIDENCE	#	%
NEWFOUNDLAND	17	89.5
OUT OF PROVINCE	2	10.5
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	4	0.2	2	50.0	1	0	1	0
1987-88	5	0.3	3	60.0	0	0	2	1
1988-89	8	0.5	7	87.5	6	0	0	1

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES


Reference Week Employment
April 22-28, 1990


Employment Since Graduation

WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	25.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	3	75.0
$14.01 - $16.00	0	0.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	4	57.1
MANAGERIAL, ADMINISTRATIVE & RELATED	1	14.3
CLERICAL & RELATED	1	14.3
OTHER	1	14.3
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	2	66.7
1 MONTH	0	0.0
2-3 MONTHS	1	33.3
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

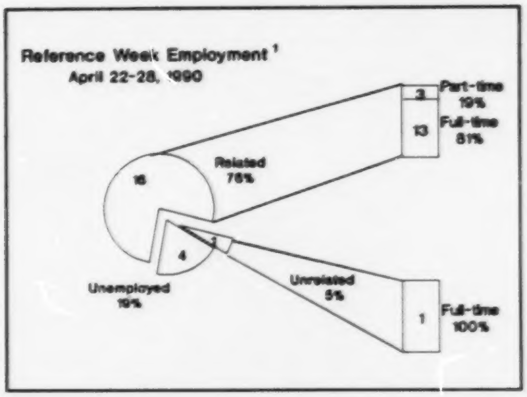
RESIDENCE	#	%
NEWFOUNDLAND	6	85.7
OUT OF PROVINCE	1	14.3
UNSPECIFIED	0	

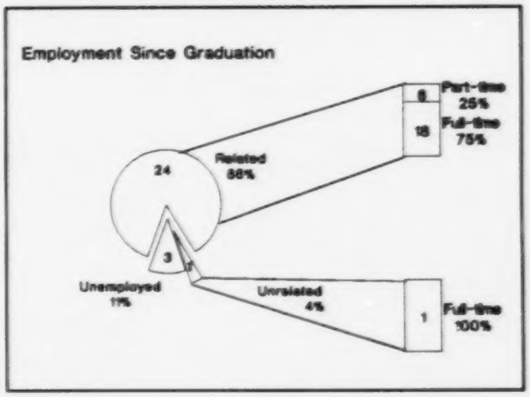
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

All Science (Honours) Programs

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	54	2.7	27	50.0	12	5	0	10
1987-88	24	1.6	15	62.5	9	2	2	2
1988-89	46	2.8	31	67.4	15	3	4	9

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	4.0
$6.01 - $8.00	1	4.0
$8.01 - $10.00	1	4.0
$10.01 - $12.00	4	16.0
$12.01 - $14.00	7	28.0
$14.01 - $16.00	5	20.0
$16.01 OR MORE	6	24.0
UNSPECIFIED	2	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	13	65.0
SOCIAL SCIENCES & RELATED	2	10.0
TEACHING & RELATED	2	10.0
OTHER	3	15.0
UNSPECIFIED	1	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	13	56.5
1 MONTH	5	21.7
2-3 MONTHS	2	8.7
4-6 MONTHS	3	13.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	2	

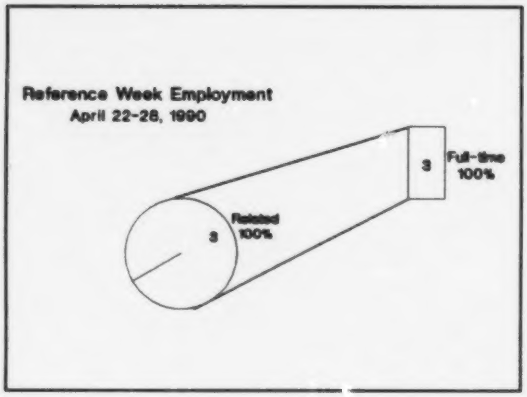
RESIDENCE	#	%
NEWFOUNDLAND	21	67.7
OUT OF PROVINCE	10	32.3
UNSPECIFIED	0	

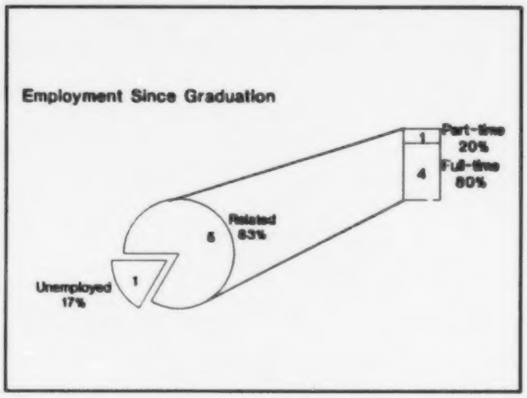
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. 1 worked full-time in reference week but did not specify relationship between job and training.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	8	0.4	5	62.5	3	0	0	2
1987-88	4	0.3	2	50.0	1	1	0	0
1988-89	9	0.5	6	66.7	3	0	0	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	1	25.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	2	50.0
$14.01 - $16.00	1	25.0
$16.01 OR MORE	0	0.0
UNSPECIFIED	1	

OCCUPATIONS	#	%
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	25.0
TEACHING & RELATED	1	25.0
SERVICE	1	25.0
OTHER	1	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	3	75.0
1 MONTH	1	25.0
2-3 MONTHS	0	0.0
4-6 MONTHS	0	0.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	1	

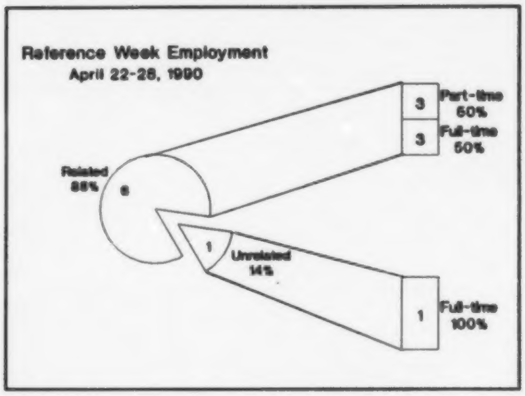
RESIDENCE	#	%
NEWFOUNDLAND	3	50.0
OUT OF PROVINCE	3	50.0
UNSPECIFIED	0	

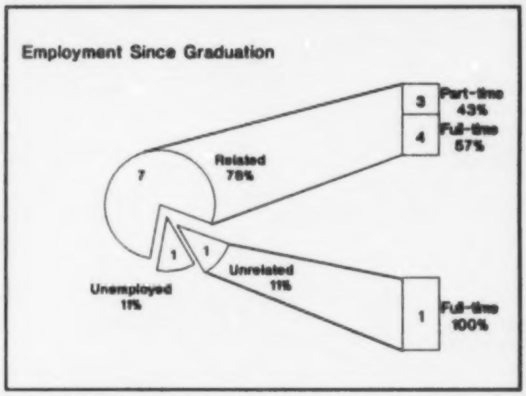
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

1. To enable reporting, the Cell/Microbiology, Entomology/Parasitology, Experimental, Marine and Northern/Boreal options were consolidated with the Biology major.

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	16	0.8	9	56.3	2	4	0	3
1987-88	2	0.1	1	50.0	1	0	0	0
1988-89	12	0.7	10	83.3	4	3	0	3

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	1	12.5
$10.01 - $12.00	2	25.0
$12.01 - $14.00	2	25.0
$14.01 - $16.00	1	12.5
$16.01 OR MORE	2	25.0
UNSPECIFIED	0	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	2	50.0
NATURAL SCIENCES, ENGINEERING & MATHEMATICS	1	25.0
SALES	1	25.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	1	12.5
1 MONTH	3	37.5
2-3 MONTHS	2	25.0
4-6 MONTHS	2	25.0
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	7	70.0
OUT OF PROVINCE	3	30.0
UNSPECIFIED	0	

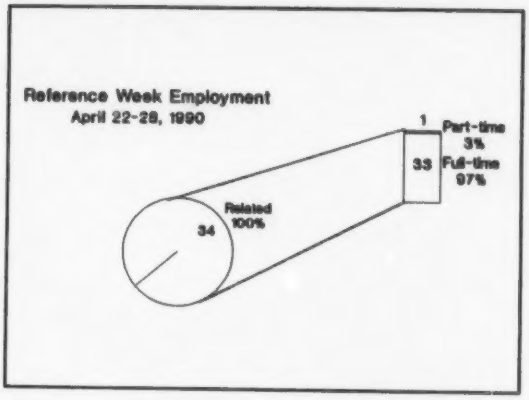
FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

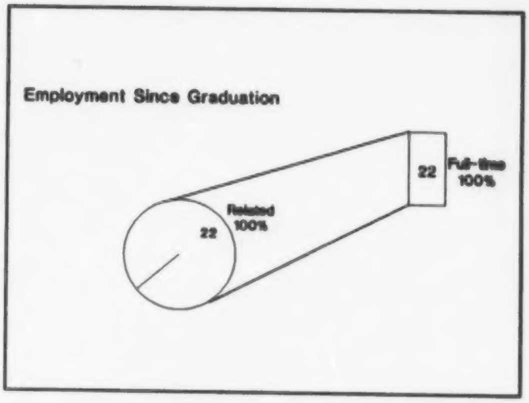
SCHOOL OF SOCIAL WORK

Social Work

ACADEMIC YEAR	GRADUATES	% OF TOTAL GRADUATES	RESPONDENTS		EMPLOYMENT IN REFERENCE WEEK			
			#	%	FULL-TIME	PART-TIME	UNEMPLOYED	OTHER
1986-87	34	1.7	16	47.1	15	1	0	0
1987-88	37	2.5	16	43.2	14	2	0	0
1988-89	45	2.7	34	75.6	33	1	0	0

LABOUR MARKET OUTCOMES FOR 1988-89 GRADUATES





WAGE LEVELS	#	%
$4.00 - $6.00	0	0.0
$6.01 - $8.00	0	0.0
$8.01 - $10.00	0	0.0
$10.01 - $12.00	0	0.0
$12.01 - $14.00	5	16.1
$14.01 - $16.00	18	58.1
$16.01 OR MORE	8	25.8
UNSPECIFIED	3	

OCCUPATIONS	#	%
SOCIAL SCIENCES & RELATED	32	97.0
SERVICE	1	3.0
UNSPECIFIED	0	

EMPLOYMENT SEARCH	#	%
BEFORE GRADUATION	14	63.6
1 MONTH	2	9.1
2-3 MONTHS	5	22.7
4-6 MONTHS	1	4.5
MORE THAN 6 MONTHS	0	0.0
UNSPECIFIED	0	

RESIDENCE	#	%
NEWFOUNDLAND	28	82.4
OUT OF PROVINCE	6	17.6
UNSPECIFIED	0	

FOOTNOTES - Refer to Users Guide on page 6 for interpretation.

APPENDICES

APPENDIX A: Graduate Questionnaire

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
SURVEY OF 1989 POST-SECONDARY INSTITUTION GRADUATES

Sponsored by: The Department of Education
Research and Policy Division

Congratulations on completing a post-secondary education program in 1989. We realize that it is getting increasingly difficult to find employment in today's job market. Our Department must continuously monitor what happens to graduates in order to provide effective training programs and career guidance. The information which we collect through this survey will provide valuable insight into educational and employment issues affecting you and other graduates of post-secondary institutions. This survey is your opportunity to give us feedback on your experiences. Your opinions are very **important** to us, so please take the time to complete and return this questionnaire to us in the enclosed postage paid envelope.

The institution you attended has provided us with your address and program of study. You will notice that there is an identification sticker affixed at the bottom of this page. Please do **not** remove it, as it links your response to your institution and program of study. Without it, your answers cannot be included.

The answers which you provide will be held in the strictest confidence, will not be released to other agencies and will be combined with those of other students. Therefore, no analysis will ever identify individual respondents. Your answers will be used for research and planning of future post-secondary programs and policies.

The survey will not take long to complete. Please answer the questions as thoroughly as you can and return it as soon as possible. **Remember, no postage is necessary.** Once again, thank you for your assistance.

1. **Current Residence:** Community: ____________________ ☐☐☐☐
Province: ____________________

2. **Permanent Residence:** Community: ____________________ ☐☐☐☐
Province: ____________________

3. **Marital Status:** 1 ☐ Married 2 ☐ Single 3 ☐ Other

4. How many dependents do you have? (Please include all people dependent on you for income support, such as children, family members, etc.) __________

5. If you had your time back, which of the following options would you select? (Please check only one)

1 ☐ The same program at the same institution
2 ☐ The same program at a different institution
3 ☐ A different program at the same institution
4 ☐ A different program at a different institution (Please specify) ____________________
5 ☐ No post-secondary program
6 ☐ Other (Please specify) ____________________

6. Have you taken further studies following your graduation?

1 ☐ No —> Continue at question 7.
2 ☐ Yes —> Are you currently taking a post-secondary program or course?
    1 ☐ No —> Continue at question 7.
    2 ☐ Yes —> I am attending: ☐ full-time ☐ part-time
        Why are you taking this program? (Please check all that apply to you)
        a ☐ Type of work required further training
        b ☐ To enroll in apprenticeship program
        c ☐ To upgrade qualifications in present field
        d ☐ To pursue purely academic interests
        e ☐ Couldn't find a job related to my training
        f ☐ Couldn't find any job
        g ☐ Personal interest
        h ☐ Other ____________________ (Please specify)

7. Please check the boxes which apply to your employment situation **since graduation**. In the column labelled **number of weeks**, provide the number of weeks that you have worked in that field **since graduating**. Please indicate whether the position was full-time or part-time by checking the appropriate box.

	Number of Weeks	Full-time	Part-time
☐ Worked in a field strongly related to my training	________	☐	☐
☐ Worked in a field partly related to my training	________	☐	☐
☐ Worked in a field unrelated to my training	________	☐	☐
☐ Did not work since graduating			

8. To ensure that everyone is answering the following question for the same time period, we will use a standard reference week, the **fourth week of April.** Were you working during the week of **April 22-28**, 1990?

1 ☐ Yes, full-time (30 or more hours per week)

2 ☐ Yes, part-time (less than 30 hours per week)

3 ☐ No —> What were the main reasons you were not working at this time? (Please check all that apply to you)

- a ☐ Maintaining household
- b ☐ Attending school full-time
- c ☐ Illness or disability
- d ☐ I looked for work but could not find any
- e ☐ Jobs are generally not available
- f ☐ Jobs related to my training are not available
- g ☐ Layoff (waiting for job to start)
- h ☐ Suitable jobs are not available in this location
- i ☐ Available jobs don't pay enough
- j ☐ My training is inadequate for available jobs
- k ☐ Do not have enough experience
- l ☐ Not interested in working
- m ☐ Other (Please specify) ______________________________

Question 9 refers only to people who have worked at some time since graduation. It relates to the position you held during the week of April 22-28, 1990 or, if you were not working during that week, your most recent position. Any person who has not worked since graduation should continue at question 10 on the next page.

9 a). Name of your employer? ______________________________

Type of business of your employer? ______________________________ ☐☐☐☐
(e.g. construction company, accounting practice, hair salon)

9 b). Job title or position held? ______________________________
(e.g. civil engineer, office manager, hair dresser)

What are your most important duties? ______________________________ ☐☐☐☐

9 c). How does this job relate to the program from which you graduated?

1 ☐ Strongly related 2 ☐ Partly related 3 ☐ Not related

9 d). Is this job:

1 ☐ Full-time, or 2 ☐ Part-time

Is this job:

1 ☐ Permanent, or 2 ☐ Temporary, or 3 ☐ Seasonal

9 e). What is your hourly wage, before taxes?

1 ☐ $4.00 - $6.00 2 ☐ $6.01 - $8.00 3 ☐ $8.01 - $10.00 4 ☐ $10.01 - $12.00

5 ☐ $12.01- $14.00 6 ☐ $14.01 - $16.00 7 ☐ $16.01 or more 8 ☐ Other ________________
(Please specify)

Annual salary (if known) ________________

9 f). How many months did it take you to find your first job upon graduation in 1989? (Choose 1 or 2)

1 ☐ I had a job before completing program, or 2 ☐ It took me ______ months to find a job.

9 g). How did you find your first job upon graduating in 1989? (Please check only one)

1 ☐ Past employers or business contacts
2 ☐ Instructor referrals/contacts
3 ☐ Direct unadvertised application to employer
4 ☐ Reply to an advertisement
5 ☐ Friends or relatives
6 ☐ Corporate recruitment
7 ☐ Other (Please specify) ____________________

9 h). **This question applies only to persons who have completed one year pre-apprenticeship programs.** Since you completed your training in 1989, have you registered as an apprentice with the Industrial Training Division of the Department of Education?

1 ☐ Yes
2 ☐ No —>

Would you like to be contacted by an Industrial Training Officer to find out more about the Apprenticeship Program?

1 ☐ Yes —> Name: ____________________ Phone No: (   ) ____________________
2 ☐ No

10. This section gives you an opportunity to voice your opinions. You may use this section to make any comments. For example, you may wish to address: the number of jobs available in your training area; the program of study you took; the institution which you attended, or any other relevant issues. Your thoughts will help us to help you and others. If there is not enough space here, please attach additional sheets.

Please return the survey in the enclosed postage paid envelope.
Thank you very much for your co-operation.

APPENDIX B: Programs not reported due to sample size

College Programs	Number of Graduates		
	1987	1988	1989
One Year Programs			
Bartending/Waiter Waitress	35	0	3
Computer Applications Operations	0	7	6
Diesel Mechanics	8	4	2
Hospitality Services	19	4	1
Industrial Electrical Technician	0	0	3
Legal Stenography	12	5	4
Medical Stenography	9	4	3
Oil Burner Mechanics	9	5	3
Printing	7	7	5
Refrigeration & Air Conditioning Mechanic	11	12	5
Two Year Programs			
Appraisal Assessment Technology	10	6	7
Secretarial Science (Medical)	13	8	7
Welding Engineering Technician	0	0	5
Three Year Programs			
Architectural Engineering Technology	0	0	7
Automotive Technology	0	0	6
Computer Science	0	13	7
Electrical Engineering Technology	6	8	4
Mechanical Engineering Technology (Marine Eng.)	9	17	6
Mechanical Engineering Technology (Power Eng.)	0	5	6

APPENDIX B (CONTINUED)

Memorial University Degree Programs	Number of Graduates		
	1987	1988	1989
Arts			
Classics	1	0	3
Computer Science	2	1	4
Folklore	0	5	7
German	2	1	2
Mathematics	2	3	3
Philosophy	4	3	4
Arts (Honours)			
Anthropology	0	1	2
Classics	1	0	1
History	7	3	7
Philosophy	0	3	2
Political Science	2	3	6
Psychology	2	1	2
Religious Studies	0	0	3
Education and Arts Conjoint Degrees			
Anthropology	0	0	1
Folklore	0	0	1
Linguistics	1	0	1
Mathematics	4	3	2
Political Science	1	0	2
Psychology	2	4	6
Sociology	1	1	2

APPENDIX B (CONTINUED)

Memorial University Degree Programs (Continued)	Number of Graduates		
	1987	1988	1989
Education and Science Conjoint Degrees			
Chemistry	1	1	1
Earth Sciences (Geology)	3	4	1
Physics	3	3	2
Psychology	2	1	3
Engineering			
Geological	0	1	1
Music	3	3	7
Physical Education	9	7	5
Science			
Chemistry	4	5	2
Science (Honours)			
Biochemistry	2	2	2
Chemistry	3	0	4
Computer Science	7	5	6
Earth Sciences (Geology)	12	4	6
Earth Science (Geophysics)	2	0	1
Geography (Physical)	0	6	1
Mathematics	3	1	1
Physics	1	0	4

APPENDIX C: Occupational Groupings

The Occupational groupings listed below are based on the Canadian Classification and Dictionary of Occupations (Seventh edition), developed by Employment and Immigration Canada. This occupational grouping system categorizes jobs by the kind of work which the graduates are involved in on a daily basis. In this way, jobs in different establishments and industries can be compared and grouped for meaningful analysis. In this publication, we have chosen to use the broadest level of detail from the system, the major grouping.

Artistic, Literary, Performing Arts

This major group includes occupations concerned with creating and executing artistic works, by sculpturing, painting, drawing, engraving, etching, and by applying artistic media for illustrative, decorative and sales promotion purposes; creating designs for product and interior decoration; taking photographs; directing and operating motion picture and television cameras; composing, adapting, conducting and performing musical works and dances; producing, directing and acting in theatrical, motion picture and broadcast production; making broadcast announcements; translating and interpreting languages, and preparing and editing written material.

Clerical & Related

This major group includes occupations concerned with recording, transcribing and typing data; composing correspondence; classifying and filing publications, correspondence and similar material; organizing and recording financial and other data into accounts and quantitative records; paying and receiving money; operating office machines and electronic data-processing equipment; storing, distributing and accounting for stores of materials; receiving clients and providing information; operating telephone switchboards; distributing mail and delivering messages; and performing other clerical activities.

Construction Trades

This major group includes occupations concerned with constructing, renovating and maintaining buildings and other works such as bridges, highways, railways, airports, electrical power and communication lines, towers, waterways and utility services.

Farming, Horticultural & Animal-Husbandry

This major group includes occupations concerned with growing and harvesting crops and plants; raising birds and breeding animals, livestock and poultry; landscaping and maintaining parks, gardens and grounds; and providing agricultural services to farmers.

Fishing, Trapping & Related

This major group includes occupations concerned with harvesting fish and other aquatic life from deep sea, coastal and inland waters; breeding and tagging fish; growing oysters; tending lobster pounds; hunting whales and seals; and trapping wild animals.

Forestry & Logging

This major group includes occupations concerned with the protection and conservation of forests, the felling of timber, and cutting and removing of logs and other products from forests.

Machining & Related

This major group includes occupations concerned with using machines and hand tools to shape or work such materials as metal, plastic, wood, clay, glass or stone by cutting, boring, milling, abrading, planning, punching, pressing, rolling, engraving, welding or similar methods.

Material Handling & Related, N.E.C.

This major group includes occupations, not elsewhere classified, concerned with moving, lifting, loading and packaging material and products.

Managerial, Administrative & Related

This major group includes occupations concerned with managerial and administrative activities such as: planning, organizing, coordinating, directing, controlling, staffing; and formulating, implementing or enforcing policy in government, industry and other organizations. Middle-management occupations, managers of chains of establishments, and occupations closely related to management and administration are included in this major group.

Medicine & Health

This major group includes occupations concerned with preventing and diagnosing human and animal ailments, and prescribing and giving medical and surgical treatment for diseases and illnesses, including dental disorders; giving professional and non-professional nursing care and providing special therapeutic services; and providing pharmaceutical, dietary, optical and medical support services.

Mining & Quarrying (Inc Oil & Gas)

This major group includes occupations concerned with extracting mineral ores, crude petroleum, natural gas, water, coal, potash, and other minerals from underground or open-pit mines, quarries, and oil and natural gas fields. This major group also includes occupations concerned with extracting peat moss from peat bogs.

Natural Sciences, Engineering & Mathematics

This major group includes occupations concerned with research and the practical application of scientific knowledge in the field of physical sciences, including specializations such as chemistry, electricity, electronics, geology, physics, mechanics and meteorology; in life sciences, including specializations such as agriculture, biology and pharmacology; in architecture, engineering, surveying and drafting; in mathematics, statistics, systems analysis and actuarial sciences; and in related technical fields.

Other Crafts & Equipment Operating

This major group includes crafts and equipment operating occupations concerned with operating equipment such as, printing presses, stationary engines, electric power generators, radio and television transmitters,motion pictures projectors and pipeline pumps; and performing skilled craft activities such as, bookbinding, photoengraving, recording and reproducing video images and audio sound, processing photographic film, and constructing properties for theatre, motion picture and television productions.

Occupations Not Elsewhere Classified

This major group includes occupations that cannot be properly classified in any other major group or are concerned with activities that relate to more than one major group.

Processing

This major group includes occupations concerned with refining, mixing, compounding, chemically treating, conditioning or otherwise treating materials such as ores, metals, clay, glass, stone, chemicals, petroleum, rubber, plastic, foods, beverages, paper, wood, textile fibres, hides, pelts and tobacco for direct use; or to produce semi-finished materials for further machining or fabricating; or to produce finished products such as bricks, tiles, processed food, newsprint, lumber, plywood and cloth.

Product Fabricating, Assembling, Repairing

This major group includes occupations concerned with using manufactured components and assemblies to produce or repair products: such as, automobiles, airplanes, and marine craft, industrial and agricultural machinery, commercial and business machines, domestic appliances, precision instruments; electrical and electronic equipment, rubber and plastic products, garments, footwear, furniture, housewares, and jewellery, by assembling them in a factory or in a shop or yard. Activities include: final working, fitting and finishing of parts and assemblies to complete fabrication; and installation and repair of finished products or equipment.

Religion

This major group includes occupations primarily concerned with providing spiritual and moral guidance to members of a religious faith or denomination, and other; expounding religious doctrine, and performing other activities associated with the practice and exposition of religion.

Sales

This major group includes occupations concerned with selling commodities and services, buying commodities for resale, and with conducting wholesale and retail businesses on their own or owners' behalf or in partnership.

Service

This major group includes occupations concerned with providing protection and help in case of fire, crime, accidents; providing catering services including cooking, preparing and serving food and beverages; providing accommodation services; maintaining cleanliness in establishments such as hotels, motels, lodging houses, apartment and office buildings; escorting guests and handling baggage; preparing sleeping accommodation; providing funeral arrangements, embalming and cemetery services; cutting and styling hair, and giving beauty treatments; providing personal services such as caring for children, ushering, and arranging for people's comfort on tours, aboard ships and airplanes; washing, cleaning, drying, pressing and dyeing apparel and textile furnishings; cleaning building interiors and equipment, operating elevators and performing minor maintenance repairs; and providing other related services.

Social Sciences & Related

This major group includes occupations concerned with assisting individuals, families and groups, to solve their social, economic and personal problems; planning and conducting social services to meet the needs of persons in a community; applying principles relating to statute law and its administration; organizing, developing and maintaining libraries, archives, museums and art galleries; counselling individuals and groups; and performing other related duties.

Sport & Recreation

This major group includes occupations concerned with employment for monetary gain in athletics, sports, recreation and amusement. Activities include: administering and directing athletic programs; selecting,training and managing athletes; giving instruction in professional sports; officiating at games and sporting events; participating in sports and athletics as competitor or player; and providing services directly related to athletics, sports, recreation and amusement.

Teaching & Related

This major group includes occupations concerned with conducting classes and giving private lessons to instruct students at all levels, undertaking research, advising on teaching methods and instructional aids, organizing teaching activities, and performing related duties.

Transportation Equipment Operating

This major group includes occupations concerned with operating transport equipment such as, aircraft, trains, ships, trucks and buses to move freight and passengers. Occupations engaged in direct support activities which are an integral part of transportation of passengers and cargo are also classified in this major group.